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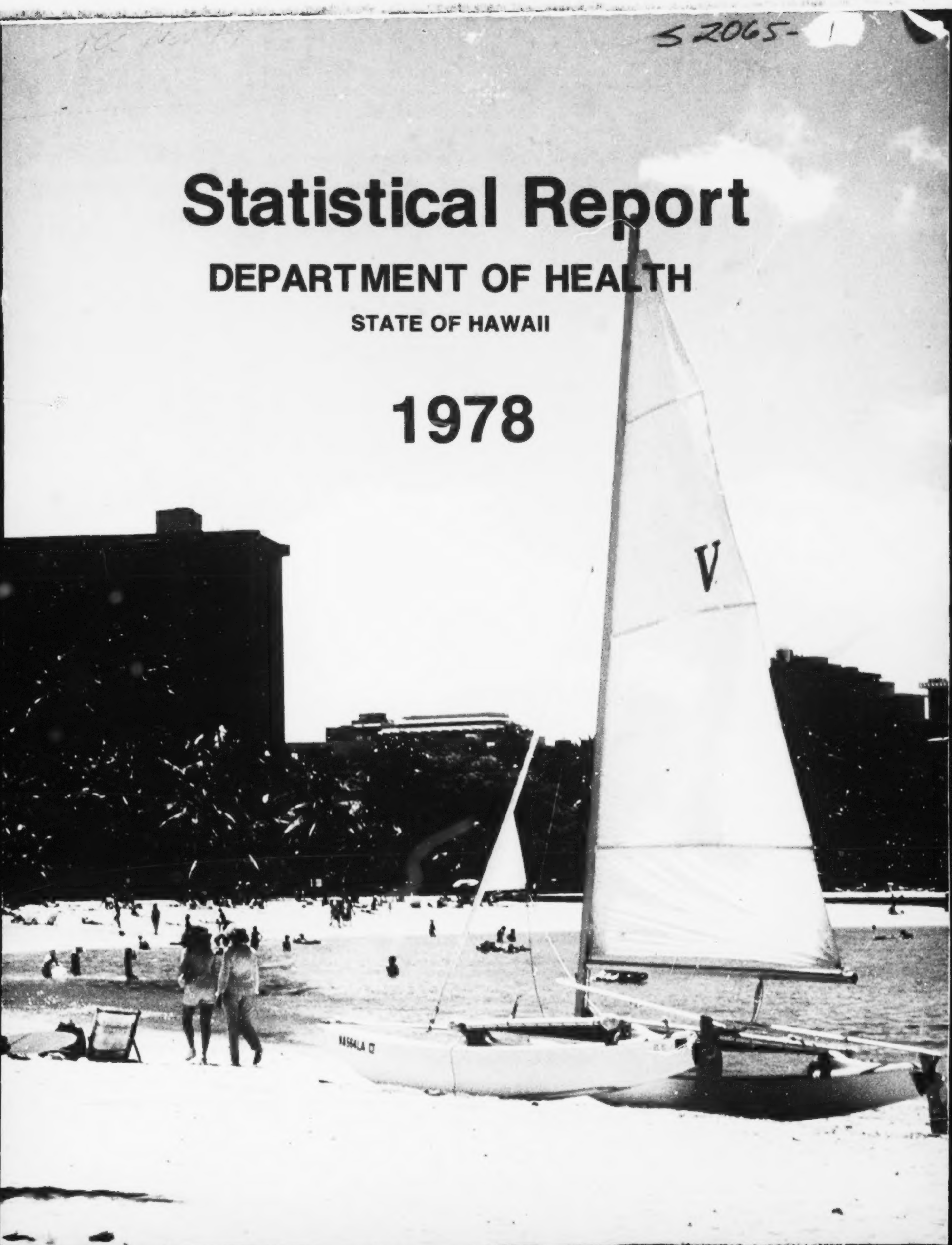

Statistical Report

DEPARTMENT OF HEALTH

STATE OF HAWAII

1978

STATISTICAL SUPPLEMENT

DEPARTMENT OF HEALTH

STATE OF HAWAII

This is the statistical supplement to the descriptive report
published in a separate volume.
Anyone who would like additional information may
write directly to the office concerned.

1978*

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*Unless otherwise stated, data included in this report are for the
calendar year 1978. Publication date, October, 1979.

Cover photo: By Mr. Tom Fujise, Health Education Office, Health Department
Waikiki Beach scene near the Hilton Hawaiian Village

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VITAL STATISTICS SUMMARY, 1978

Population

The provisional estimate of the total resident population of the State of Hawaii as of July 1, 1978 was 896,579, an increase of .6 of one percent over the revised July 1, 1977 total of 891,385 and 16.5 percent over the 769,913 total reported by the United States Census Bureau for April 1, 1970.

The average annual increase in the resident population of Hawaii between April 1, 1970 and July 1, 1978 was approximately 2.0 percent per year as compared to .8 of one percent for the nation as a whole during the same period.

The military community was estimated to be 117,580 on July 1, 1978, 3.2 percent below the 121,491 total reported on July 1, 1977. The military community constituted 13.1 percent of the state's resident population and consisted of 56,486 active members of the armed forces and 61,094 dependents.

The July 1, 1978 resident civilian community population, exclusive of the 117,580 members of the military community, totaled 778,999 or 86.9 percent of the total resident population of the state.

Births

A total of 16,762 live births was recorded in the state for the calendar year 1978 as compared with 16,983 for 1977, a decline of 1.3 percent.

Births to residents of the state totaled 16,717 in 1978 as compared to 16,874 in 1977, a decline of .9 of one percent.

The 1978 crude resident live birth rate for the state was 18.6 per 1,000 population as compared to 18.9 per 1,000 population for 1977. The provisional crude live birth rate for the United States was 15.3 per 1,000 population in 1978, as well as in 1977.

The 1978 crude live birth rate for Hawaii County was 21.2 per 1,000 population based on 1,713 resident births. Maui County registered 1,241 live births in 1978 for a crude live birth rate of 20.2 per 1,000 population. A total of 13,004 births was recorded in Honolulu County in 1978, giving a crude live birth rate of 18.1 per 1,000 population.

The 758 live births recorded for Kauai County in 1978 was 100 above the 658 registered in 1977, resulting in a crude live birth rate of 21.8 per 1,000 population.

A total of 3,343 resident live births was registered in 1978 for the military community consisting of 117,580 military personnel and their dependents. The crude live birth rate for this relatively younger segment of the state population was 28.4 per 1,000 population. The comparable rate for 1977 was 31.0 per 1,000 population.

The resident crude live birth rate for the civilian community for 1978 based on 13,374 live births was 17.2 per 1,000 population. The 1977 rate was 16.9 per 1,000 population.

Multiple Births

The 292 multiple births recorded for 1978 constituted 1.6 percent of 16,762 total live births recorded for 1978.

Low Birthweight Babies

Babies of low birthweight, those weighing under 2,500 grams (5 pounds, 8 ounces), totaled 1,027, or 6.3 percent of the 16,431 single live births recorded for 1978. The comparable figure was also 6.3 percent for 1977.

The median weight of single live births for 1978 was eight pounds, eight ounces or 3,400 grams, as compared to seven pounds, four ounces (3,272 grams) in 1977.

Attendant at Birth

Out of 16,717 babies, 234, or 1.4 percent, were born outside of a hospital. Of the 234 babies, 79 were born at home but attended by a physician, two were delivered at home by a midwife, and 153 were born at home without any medical assistance.

Month of Prenatal Visit

During 1978, 71.7 percent of the 16,717 mothers reported that they had visited a physician for prenatal care within the first three months of their pregnancy. Another 22.4 percent of the mothers made their first prenatal visit between the fourth and sixth months of pregnancy, while 4.7 percent made their first visit between the seventh month of pregnancy and the time of delivery. Only 201 mothers, or 1.2 percent, reported that they received no prenatal care.

Illegitimate Live Births

The illegitimate live birth rate among resident births was 160.1 per 1,000 live births for 1978 as compared with 143.4 in 1977, an increase of 11.7 percent. There were 2,677 resident illegitimate births in 1978 and 2,419 in 1977.

The 1978 illegitimate birth rate was 192.6 per 1,000 live births for Hawaii County, 153.5 for Honolulu County, 163.6 for Kauai County and 182.9 for Maui County.

Standard Fetal Deaths

Standard fetal deaths, i.e., fetal deaths due to spontaneous or unknown causes, and exclusive of elective abortions, totaled 1,467 among residents of the state in 1978 compared to 1,635 in 1977. The resident standard death rate was 87.8 per 1,000 live births in 1978 and 93.5 in 1977.

Elective Abortions (Induced abortions)

A total of 6,014 resident elective induced abortions was recorded in the State of Hawaii in 1978, 19.1 percent above the 5,050 reported for 1977. The resident elective induced abortion ratio was 347.3 per 1,000 live births for 1978 and 299.3 for 1977, an increase of 16.0 percent.

Among the counties in 1978, the highest elective induced abortion ratio was experienced in Maui County where the ratio was 359.4 per 1,000 live births, followed by Honolulu County (358.8), Hawaii County (282.5) and Kauai County (277.0).

An extremely high abortion ratio was observed in Honolulu City (531.6 per 1,000 live births) and on Maui Island (397.8 per 1,000 live births) during 1978.

Among women under 40 years of age, the highest elective induced abortion ratio was found in the age group 15-17 years of age (732.4 per 1,000 live births) followed by those 18-19 years of age (547.4 per 1,000 live births).

The median gestational age of the fetuses aborted was 8.7 weeks.

A total of 4,043 out of the 6,014 elective induced abortions reported in 1978, or 67.2 percent, were illegitimate.

The median age of women having an elective induced abortion in 1978 was 24.1 years.

The most commonly used procedure in performing abortions was suction and curettage (86.6 percent) followed by prostaglandin (4.8 percent) and Sharp dilatation and curettage (1.7 percent).

Some of the increase in elective induced abortions was due to the establishment of a separate abortion report form and the option of reporting an abortion by name of the patient, or hospital or physician case number.

Infant Deaths

Resident infant deaths totaled 186 for 1978 compared to 196 for 1977. The resident infant death rate was 11.1 for 1978 as compared to 11.6 for 1977, a reduction of 4.3 percent.

The provisional infant death rate for the United States as a whole was 13.7 per 1,000 live births in 1978 and 14.0 in 1977.

The lowest infant death rate in 1978 was observed in Maui County where the rate fell from 10.5 per 1,000 live births in 1977 to 7.3 in 1978. Hawaii County experienced a rate of 8.2 per 1,000 live births while the rate was 11.8 for Honolulu County and 11.9 for Kauai County.

Among the more common ethnic groups, the Chinese experienced an infant death rate of only 1.8 per 1,000 live births; the Caucasian, 9.0; the Japanese, 11.1; and the Filipino, 11.8.

The neonatal death rate (death under 28 days) for the state was 7.6 per 1,000 live births for 1978 as compared with 7.9 per 1,000 live births for 1977.

The 1978 infant mortality rate among low birthweight infants -- babies weighing less than five pounds, eight ounces (2,500 grams) -- was 98.8 per 1,000 low birthweight babies.

Perinatal Mortality Rate

The perinatal mortality rate -- the sum of infant deaths under one week of age and standard fetal deaths (spontaneous abortions and abortions of unknown causes) divided by perinatal events (sum of all resident live births and standard fetal deaths of 20 weeks gestation and over) -- was 15.2 per 1,000 perinatal events for 1978, as compared to 20.6 for 1977.

Deaths

A total of 4,860 deaths was registered in the State of Hawaii in 1978 as compared with 4,725 deaths for 1977. Resident deaths numbered 4,508 while non-resident deaths equaled 352.

The resident crude death rate for the state was 5.0 per 1,000 population for 1978.

The 1978 provisional crude death rate for the nation as a whole was 8.9 per 1,000 population.

The 1978 resident crude death rate was 6.4 per 1,000 population for Hawaii County, 4.6 for Honolulu County, 6.8 for Kauai County and 7.0 for Maui County.

Leading Causes of Death

The crude death rate for the state for the year 1978 was 5.0 per 1,000 population.

During 1978, the first five leading causes of death did not change from their 1977 ranking. These cause of death categories were: "Diseases of the Heart," 160.7 per 100,000 population; "Malignant Neoplasms," 113.2 per 100,000 population; "Cerebrovascular Diseases," 49.6 per 100,000 population; "All Accidents," 31.2 per 100,000 population; and "Influenza and Pneumonia," 16.1 per 100,000 population.

"Diabetes Mellitus" (13.3 per 100,000 population) moved from its number eight position in 1977 to the sixth leading cause of death in 1978, while "Deaths from Suicide" (11.8 per 100,000 population) dropped from its number six 1977 ranking to number seven in 1978. "Deaths from Certain Causes of Mortality in Early Infancy" (9.7 per 100,000 population) dropped from the number seven position in 1977 to the number eight position in 1978.

There were no changes in the rankings between 1977 and 1978 for the following cause of death categories: number nine, "Cirrhosis of the Liver" 7.2 per 100,000 population; number 10, "Congenital Anomalies" 6.2 per 100,000 population; number 11, "Homicide and Legal Intervention" 6.1 per 100,000 population; and number 12, "Bronchitis, Emphysema and Asthma" 5.3 per 100,000 population.

Maternal Deaths

There was one maternal death in 1978, which gave a maternal death rate of 6.0 per 100,000 live births. This was the first maternal death reported since 1975.

The last published maternal mortality rate for the nation as a whole was for 1977. The rate was 11.2 per 100,000 births.

Marriages

A total of 10,736 marriages was recorded in the state during the year 1978 as compared to 10,266 in 1977, an increase of 4.6 percent. The crude marriage rate for 1978 was 12.0 per 1,000 population as compared to 11.5 for 1977.

The out-marriage rate -- the number of marriages where the bride and groom are of different ethnic extraction -- was 37.9 percent for 1978. The rate was 37.5 percent for 1977 and 38.8 percent in 1976.

Among brides, 64.7 percent were never married previously, 31.9 percent were divorced, and 3.2 percent were widows.

Among grooms, 63.5 percent were never married previously, 33.3 percent were divorced, and 2.9 percent were widowers.

Among brides, 28.7 percent had been married once previously and 5.6 percent had married twice previously whereas among grooms, 28.6 percent had been married once previously and 6.6 percent had been married twice previously.

The median age at marriage was 25.3 years for brides and 27.9 years for grooms.

The months with the highest number of marriages were August (1,083), December (1,074) and June (1,062).

Among grooms, 22.3 percent were non-residents as compared with 21.9 percent among brides. In 19.4 percent of the marriages, both the bride and groom were non-residents.

Divorces

The trend in divorces continued upward with a total of 4,837 registered in 1978 as compared with 4,601 divorces recorded in 1977. The increase amounted to 5.1 percent.

The crude divorce rate was 5.4 per 1,000 population in 1978. The provisional divorce rate for 1978 was 5.1 per 1,000 population for the nation as a whole.

The 1978 crude divorce rates were 4.2 per 1,000 for Hawaii County, 5.5 for Honolulu County, 5.1 for Kauai County and 5.9 for Maui County.

TABLE 1

ESTIMATED POPULATION BY RESIDENCE AND MILITARY STATUS
State of Hawaii 1970, 1977 and 1978

	Resident Population				
	Total		Armed Forces[1]	Civilian[2]	
APRIL 1, 1970	Number	Percent	Number	Number	Percent
State Total	769,913	100.0	55,142	714,771	100.0
City & County of Honolulu ...	630,528	81.9	54,809	575,719	80.5
Hawaii County	63,468	8.2	140	63,328	8.9
Kauai County	29,761	3.9	134	29,627	4.1
Kauai Island	29,524	3.8	134	29,390	4.1
Niihau Island	237	0.0	-	237	0.0
Maui County[3]	46,156	6.0	59	46,097	6.5
Lanai Island	2,204	0.3	-	2,204	0.3
Maui Island	38,691	5.0	59	38,632	5.4
Molokai Island[3]	5,261	0.7	-	5,261	0.8
JULY 1, 1977 (Revised)					
State Total	891,385	100.0	46,485	834,900	100.0
City & County of Honolulu ...	717,566	80.5	56,157	661,409	79.2
Hawaii County	79,199	8.9	158	79,041	9.5
Kauai County[4]	34,363	3.9	138	34,225	4.1
Maui County[3]	60,257	6.8	32	60,225	7.2
Lanai Island	2,192	0.2	-	2,192	0.3
Maui Island	51,623	5.8	28	51,595	6.2
Molokai Island[3]	6,442	0.7	4	6,438	0.7
JULY 1, 1978 (Provisional)					
State Total	896,579	100.0	56,486	840,093	100.0
City & County of Honolulu ...	719,577	80.3	56,114	663,463	79.0
Hawaii County	80,885	9.0	187	80,698	9.6
Kauai County[4]	34,693	3.9	163	34,530	4.1
Maui County[3]	61,424	6.9	22	61,402	7.3
Lanai Island	2,112	0.2	-	2,112	0.3
Maui Island	52,883	5.9	22	52,861	6.3
Molokai Island[3]	6,429	0.7	-	6,429	0.8

[1] Includes Navy and Coast Guard crews.

[2] Includes Military dependents (1970=61,858; 1977=65,005)

[3] Includes Kalawao County (Kalaupapa 1970=172; 1977=176)

[4] Estimate for Niihau: 247 as of July 1, 1977 and 266 as of July 1, 1978.

Source: Hawaii State Department of Planning and Economic Development, Statistical Memorandum 79-4; Population Estimates by Islands, 1977 and 1978, March 29, 1979.

TABLE 1A

DEPARTMENT OF HEALTH
ANNUAL PHYSICIANS ROSTER

PHYSICIANS LICENSED IN THE STATE OF HAWAII BY RACE, TYPE OF PRACTICE, PLACE OF RESIDENCE AND SEX AS OF JUL 1, 1979

RACE	TOTAL LICENSED BY THE STATE	STATE OF HAWAII			PLACE OF RESIDENCE												NONRESIDENT	
					HAWAII		OAHU		KAUAI		LANAI		MAUI		MOLOKAI			
		TOTAL	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	3,187	1905	1705	200	117	10	1419	173	64	6	2	0	94	9	5	0	1149	133
HAWAIIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PART-HAWAIIAN	16	15	15	0	1	0	11	0	3	0	0	0	0	0	0	0	1	0
PUERTO RICAN	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
CAUCASIAN	1,232	640	589	51	52	1	457	47	29	0	1	0	47	3	3	0	548	44
CHINESE	310	237	220	17	8	0	208	17	1	0	0	0	3	0	0	0	61	12
JAPANESE	323	270	252	18	17	2	226	14	4	1	0	0	5	1	0	0	48	5
KOREAN	36	30	28	2	3	0	24	2	1	0	0	0	0	0	0	0	2	4
FILIPINO	79	60	42	18	1	0	36	18	2	0	0	0	3	0	0	0	17	2
OTHER	33	29	23	6	3	1	19	5	0	0	0	0	1	0	0	0	4	0
NEGRO	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
UNKNOWN	1,156	623	536	87	32	6	438	69	24	5	1	0	35	5	2	0	467	66
PRIVATE	1,845	1315	1198	117	98	8	981	99	46	4	1	0	68	6	4	0	490	40
RETIRED	47	34	32	2	3	0	23	2	3	0	0	0	3	0	0	0	11	2
OTHER	305	127	103	24	4	0	92	22	2	1	0	0	5	1	0	0	159	19
MILITARY	173	73	68	5	1	0	67	5	0	0	0	0	0	0	0	0	99	1

FIGURE 1

BIRTHS OCCURRING IN HAWAII 1900-1978

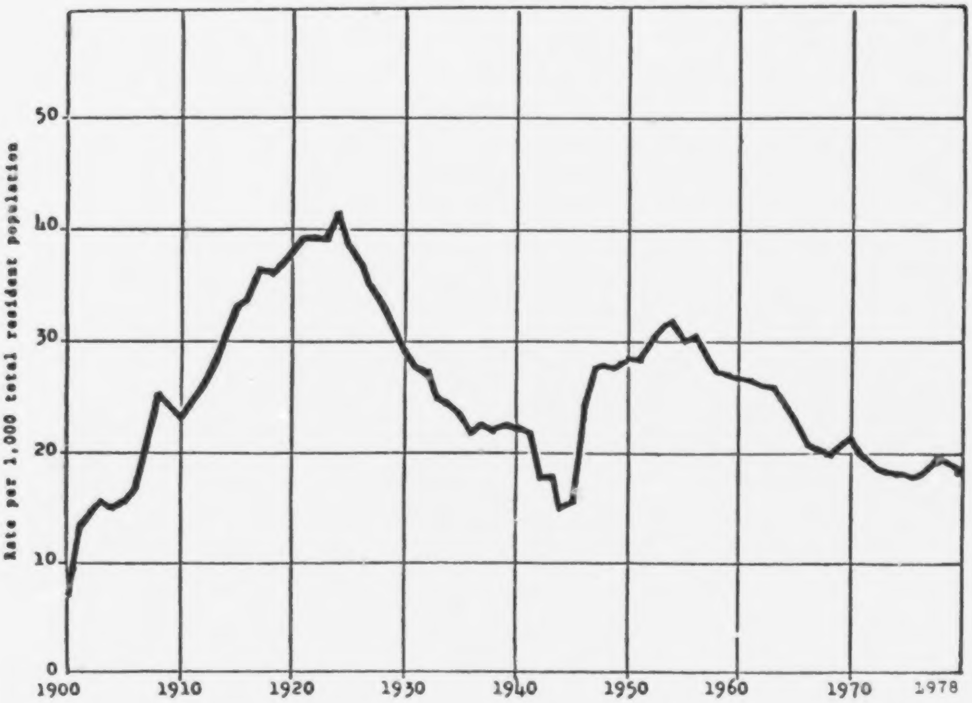
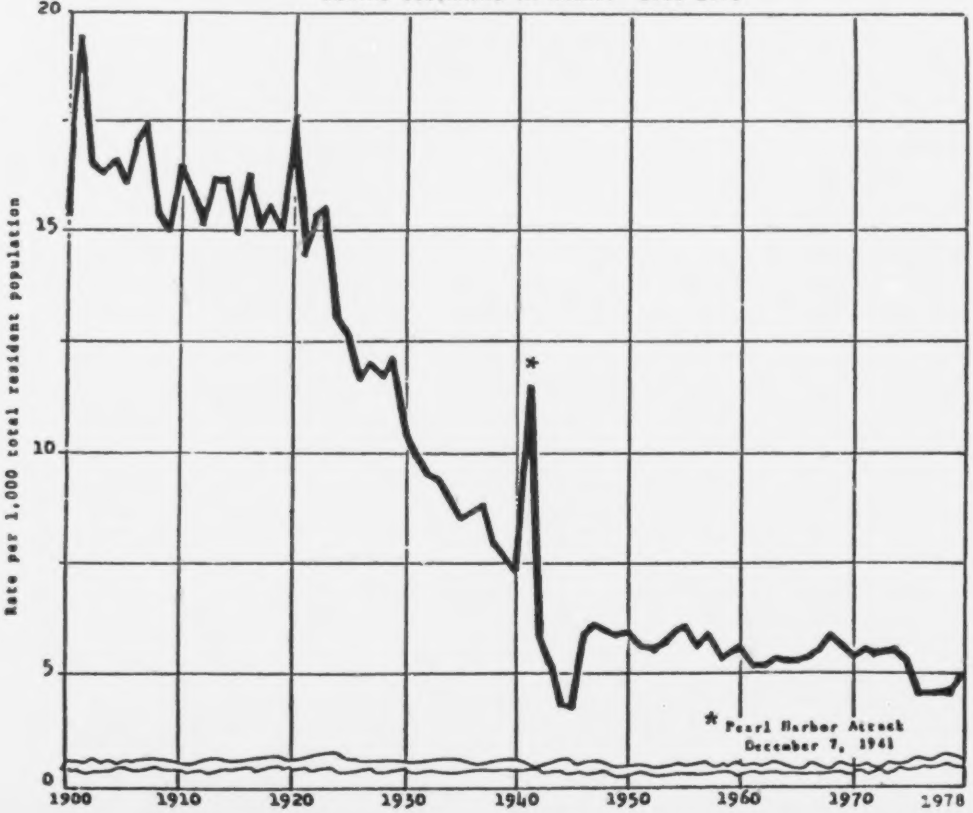


FIGURE 2

DEATHS OCCURRING IN HAWAII 1900-1978



* Pearl Harbor Attack December 7, 1941

TABLE 2

LIVE BIRTHS BY PLACE OF OCCURRENCE REALLOCATED TO PLACE OF RESIDENCE AND RACE OF CHILD
STATE OF HAWAII, 1978

GEOGRAPHIC AREA	PLACE OF OCCURRENCE	BIRTH BY PLACE OF RESIDENCE		RACE OF CHILD														
		NO.	RATE*	CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERT RICAN	KOREAN	SAMOAN	NEGRO	PORTUGESE	VIETMESE	OTHER	UNKNOWN
TOTAL RECORDED	16762	16762	...	3937	53	5004	566	2804	2338	215	242	486	465	197	48	402	5
STATE OF HAWAII	16762	16717	18.6	3909	53	5001	566	2803	2336	215	242	485	458	197	48	399	5
COUNTY OF HAWAII	1703	1713	21.2	292	11	766	19	245	262	35	7	3	9	24	2	37	1
CITY OF HILO	1097	632	--	60	6	291	7	71	152	14	4		6	4	1	15	1
BALANCE OF COUNTY	606	1081	--	232	5	475	12	174	110	21	3	3	3	20	1	22	
COUNTY OF HONOLULU	13121	13004	18.1	3252	25	3488	524	2089	1802	148	229	479	446	131	46	341	4
CITY OF HONOLULU	11877	5235	---	970	6	1268	339	959	910	48	151	256	107	43	27	151	
BALANCE OF COUNTY	1244	7769	---	2282	19	2220	185	1130	892	100	78	223	339	88	19	190	4
COUNTY OF KALAWAO		1	5.8	1													
COUNTY OF KAUAI	748	758	21.9	119	3	265	9	227	111	12	2		1	2		7	
ISLAND OF KAUAI	748	756	22.0	119	2	264	9	227	111	12	2		1	2		7	
ISLAND OF NIIHAU		2	7.5		1	1											
COUNTY OF MAUI	1189	1241	20.2	245	14	482	14	242	161	20	4	3	2	40		14	
ISLAND OF LANAI	12	24	11.4	5		5		12	1					1			
ISLAND OF MAUI	1093	1101	20.8	234	14	395	13	217	152	19	3	3	1	37		13	
ISLAND OF MOLOKAI (EXCL. KALAWAO)	84	116	18.0	6		82	1	13	8	1	1		1	2		1	
NONRESIDENT		44	---	28		2		1	2			1	7			3	
UNKNOWN RESIDENCE	1	1	---			1											

*NUMBER OF BIRTHS PER 1,000 RESIDENT POPULATION

TABLE 3

LIVE BIRTHS BY PLACE OF OCCURRENCE REALLOCATED TO PLACE OF RESIDENCE AND RACE OF MOTHER STATE OF HAWAII, 1978

GEOGRAPHIC AREA	PLACE OF OCCURRENCE	BIRTH BY PLACE OF RESIDENCE NO.	BIRTH BY PLACE OF RESIDENCE RATE*	RACE OF MOTHER CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERT RICAN	KOREAN	SAMOAN	NEGRO	PORTUGESE	VIET MESE	OTHER	UNKNOWN
TOTAL RECORDED	16762	16762	...	5191	137	3496	609	2998	2368	267	289	468	332	158	63	379	7
STATE OF HAWAII	16762	16717	18.6	5163	137	3493	609	2997	2365	267	289	467	326	158	63	376	7
COUNTY OF HAWAII	1703	1713	21.2	465	29	499	26	291	274	49	6	1	3	18	2	49	1
CITY OF HILO	1097	632	---	130	20	183	9	93	148	22	2		2	2	1	19	1
BALANCE OF COUNTY	606	1081	---	335	9	316	17	198	126	27	4	1	1	16	1	30	
COUNTY OF HONOLULU	13121	13004	18.1	4094	67	2513	559	2240	1823	171	271	465	322	110	60	304	5
CITY OF HONOLULU	11877	5235	---	1311	20	900	359	978	915	61	182	238	65	37	34	135	
BALANCE OF COUNTY	1244	7769	---	2783	47	1613	200	1262	908	110	89	227	257	73	26	169	5
COUNTY OF KALAWAO		1	5.8	1													
COUNTY OF KAUAI	748	758	21.9	212	10	166	7	227	105	17	3		1			10	
ISLAND OF KAUAI	748	756	22.0	212	9	165	7	227	105	17	3		1			10	
ISLAND OF NIIHAU		2	7.5		1	1											
COUNTY OF MAUI	1189	1241	20.2	391	31	315	17	239	163	30	9	1		30	1	13	1
ISLAND OF LANAI	12	24	11.4	6		3		12	3								
ISLAND OF MAUI	1093	1101	20.8	370	27	248	15	205	153	30	9	1		29	1	12	1
ISLAND OF MOLOKAI (EXCL. KALAWAO)	84	116	18.0	15	4	64	2	22	7					1		1	
NONRESIDENT		44	---	28		2		1	3			1	6			3	
UNKNOWN RESIDENCE	1	1	---			1											

*NUMBER OF BIRTHS PER 1,000 RESIDENT POPULATION

TABLE 4

LIVE BIRTHS BY RACE OF MOTHER AND TYPE OF CONGENITAL MALFORMATION STATE OF HAWAII, 1978

TYPE OF CONGENITAL MALFORMATION	TOTAL	PERCENT	RACE OF MOTHER CAU CASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTUGESE	VIETNAMESE	OTHER	UNKNOWN
TOTAL	16,717	100.0	5,163	137	3,493	609	2,997	2,365	267	289	467	326	158	63	376	
PERCENT 100.0			30.9	.8	20.9	3.6	17.9	14.1	1.6	1.7	2.8	2.0	.9	.4	2.2	
NO MALFORMATION	16,562	99.1	5,118	135	3,455	601	2,973	2,345	266	283	463	323	157	63	373	
ONE OR MORE MALFORMATIONS	155	.9	45	2	38	8	24	20	1	6	4	3	1		3	
ANENCEPHALUS (01)	5		2		1	1	1									
SPINA BIFIDA, MENINGOCELE (02)	4		2		1			1								
HYDROCEPHALUS (04)	7		2		2			1			1		1			
CIRCULATORY SYSTEM (00, 07)	3		1				1	1								
CLEFT PALATE & HARELIP (09)	18	.1	6		6		3			1		1			1	
DIGESTIVE SYSTEM (10)	5		2					2		1						
GENITO-URINARY (11)	3		1					1	1							
CLUBFOOT (12)	4				3					1						
BONE & JOINT (13, 14)	23	.1	6		4	2	6	2		1	2					
MULTIPLE ANOMALIES (16, 17, 18)	15	.1	5	1	3	1		4		1						
DOWNS DISEASE (15)	6		1		2	1	1	1								
OTHER AND UNSPECIFIED (RESIDUAL)	69	.4	19	1	18	3	13	8		1	2	2			2	

* IF ANY INFANT HAS MORE THAN ONE CONGENITAL MALFORMATION, THE SUM OF THE PERCENTAGES WILL BE GREATER THAN 100

TABLE 5

LIVE BIRTHS BY PLACE AND MONTH OF OCCURRENCE
STATE OF HAWAII, 1978

GEOGRAPHIC AREA	TOTAL	PERCENT	MONTH OF BIRTH JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TOTAL RECORDED	16762	100.0	1392	1261	1349	1303	1353	1318	1402	1452	1488	1547	1422	1475
STATE OF HAWAII	16761	100.0	1392	1261	1349	1303	1353	1318	1402	1452	1487	1547	1422	1475
PERCENT	100.0	...	8.3	7.5	8.0	7.8	8.1	7.9	8.4	8.7	8.9	9.2	8.5	8.8
COUNTY OF HAWAII	1703	10.2	124	113	136	138	147	129	161	138	152	151	163	151
CITY OF HILO	1097	6.5	86	72	92	95	85	80	105	86	91	100	108	97
BALANCE OF COUNTY	606	3.6	38	41	44	43	62	49	56	52	61	51	55	54
COUNTY OF HONOLULU	13121	78.3	1098	989	1056	992	1052	1064	1097	1144	1166	1193	1108	1162
CITY OF HONOLULU	11877	70.9	1002	884	959	884	957	961	1014	1031	1061	1076	992	1056
BALANCE OF COUNTY	1244	7.4	96	105	97	108	95	103	83	113	105	117	116	106
COUNTY OF KALAWAO														
COUNTY OF KAUAI	749	4.5	65	69	57	70	59	46	53	64	70	82	55	58
ISLAND OF KAUAI	748	4.5	65	69	57	70	59	46	53	64	70	82	55	58
ISLAND OF NIIHAU														
COUNTY OF MAUI	1189	7.1	105	90	100	103	95	79	91	106	99	121	96	104
ISLAND OF LANAI	12	.1	3	2		1	1		1		2	1		1
ISLAND OF MAUI	1093	6.5	96	85	92	93	85	72	78	102	89	113	91	97
ISLAND OF MOLOKAI (EXCL. KALAWAO)	84	.5	6	3	8	9	9	7	12	4	8	7	5	6
NONRESIDENT														
UNKNOWN RESIDENCE	1										1			

TABLE 6

LIVE BIRTHS BY RACE OF CHILD AND ATTENDANT AT BIRTH
STATE OF HAWAII, 1978

RACE OF CHILD	TOTAL NO. OF BIRTHS	ATTENDANT AT BIRTH				PERCENT OF BIRTHS			
		OD OR MD IN HOSP.	OD OR MD NOT HOSP.	MID-WIFE	OTHER	OD OR MD IN HOSP.	OD OR MD NOT HOSP	MID-WIFE	OTHER
ALL RACES	16,717	16,483	79	2	153	100.0	100.0	100.0	100.0
CAUCASIAN	3,909	3,769	31	1	108	22.9	39.2	50.0	70.6
HAWAIIAN	53	53				.3			
PART HAWN	5,001	4,951	31	1	18	30.0	39.2	50.0	11.8
CHINESE	566	562			4	3.4			2.6
FILIPINO	2,825	2,818	4		3	17.1	5.1		2.0
JAPANESE	2,345	2,336	3		6	14.2	3.8		3.9
PUERTO RCN	226	224			2	1.4			1.3
KOREAN	244	244				1.5			
SAMOAN	486	483	2		1	2.9	2.5		.7
NEGRO	458	451	3		4	2.7	3.8		2.6
PORTUGESE	150	149			1	.9			.7
VIETNAMESE	48	46	1		1	.3	1.3		.7
OTHER	401	393	3		5	2.4	3.8		3.3
UNKNOWN	5	4	1				1.3		

TABLE 7

LIVE BIRTHS BY RACE OF FATHER AND OF MOTHER
STATE OF HAWAII, 1978

RACE OF MOTHER		ALL RACES		RACE OF FATHER													
		NUMBER	PERCENT	CAU-CASIAN	HAWN	PART HAWN	CHI-NESE	FILI-PINO	JAPA-NESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTU-GUESE	VIET-NAMESE	OTHER	UNKNOWN
ALL RACES	NUMBER	16,717	100.0	4,767	187	2,781	534	2,670	2,272	233	180	435	472	184	19	347	1,636
	PERCENT	100.0		28.5	1.1	16.6	3.2	16.0	13.6	1.4	1.1	2.6	2.8	1.1	.1	2.1	9.8
CAUCASIAN		5,163	30.9	3,565	41	477	64	229	212	36	17	46	51	31		51	343
HAWAIIAN		137	.8	24	27	32		7	9	1		3	4			4	26
PART HAWN		3,493	20.9	330	74	1,411	56	364	216	81	12	59	46	72		66	706
CHINESE		609	3.6	73	3	69	264	23	137	2	8	4	1	6		4	15
FILIPINO		2,997	17.9	316	18	362	16	1,803	135	30	10	6	30	33		27	211
JAPANESE		2,365	14.1	213	8	248	112	149	1,462	9	28	5	8	13	1	22	87
PUERTO RCN		267	1.6	25	4	53	1	36	11	57	2		17	7		4	50
KOREAN		289	1.7	62	3	20	10	11	55		99	1	8			6	14
SAMOAN		467	2.8	22	4	13	5	7	2	1	1	303	7		1	10	91
NEGRO		326	2.0	9		3		1	2				287			1	23
PORTUGUESE		158	.9	12	2	47		22	9	11	2	1	3	21		2	26
VIETNAMESE		63	.4	23		4	4	3	5						17	1	6
OTHER		376	2.2	92	3	42	2	14	17	5	1	7	10	1		149	33
UNKNOWN		7		1				1									5
FATHER AND MOTHER OF SAME RACE		9,470	56.6	3,565	27	1,411	264	1,803	1,462	57	99	303	287	21	17	149	5

TABLE 8

LIVE BIRTHS BY RACE OF MOTHER AND MONTH OF FIRST PRENATAL VISIT
STATE OF HAWAII, 1978

RACE OF MOTHER		TOTAL NO. OF BIRTHS		MONTH OF FIRST PRENATAL VISIT											
		NUMBER	PERCENT	1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	NONE	NOT STATED	FIRST 3 MONTHS
ALL RACES	NUMBER	16,717	100.0	2,119	5,659	4,198	2,010	1,116	623	403	280	105	201	3	11,976
	PERCENT	100.0		12.7	33.9	25.1	12.0	6.7	3.7	2.4	1.7	.6	1.2		71.6
CAUCASIAN		5,163	30.9	529	1,798	1,526	645	290	152	85	70	21	46	1	3,853
HAWAIIAN		137	.8	8	30	33	22	16	9	7	9	1	2		71
PART HAWN		3,493	20.9	396	1,021	825	495	297	176	108	75	29	69	2	2,242
CHINESE		609	3.6	142	230	129	44	22	15	13	4	5	5		501
FILIPINO		2,997	17.9	401	900	793	401	231	111	75	42	15	28		2,094
JAPANESE		2,365	14.1	444	1,138	422	180	92	38	23	11	5	12		2,004
PUERTO RCN		267	1.6	41	91	60	32	20	9	6	3	3	2		192
KOREAN		289	1.7	33	106	58	35	21	11	6	6	7	6		197
SAMOAN		467	2.8	36	67	83	48	63	65	48	25	13	19		186
NEGRO		326	2.0	11	93	116	43	28	17	10	6		2		220
PORTUGUESE		158	.9	28	71	33	12	7	2	2	1		2		132
VIETNAMESE		63	.4	7	29	15	5	3	1	2	1				51
OTHER		376	2.2	41	85	102	48	25	17	18	27	6	7		228
UNKNOWN		7		2		3		1					1		5

TABLE 9

LIVE BIRTHS BY RACE OF MOTHER AND NUMBER OF CHILDREN BORN TO MOTHER
STATE OF HAWAII, 1978

RACE OF MOTHER		TOTAL NO. OF BIRTHS		TOTAL NUMBER OF CHILDREN BORN TO MOTHER												
		NUMBER	PERCENT	-1-	-2	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	12 OR MORE	UNK
ALL RACES	NUMBER	16,717	100.0	5,764	5,012	3,071	1,500	694	317	164	75	35	18	9	12	46
	PERCENT	100.0		34.5	30.0	18.4	9.0	4.2	1.9	1.0	.4	.2	.1	.1	.1	.3
CAUCASIAN		5,163	30.9	1,857	1,609	945	421	175	80	40	15	4	2		2	13
HAWAIIAN		137	.8	42	29	25	17	7	7	5	2	1	1			1
PART HAWN		3,493	20.9	1,139	936	629	374	211	100	45	28	12	5	2	5	7
CHINESE		609	3.6	243	184	101	55	13	7	2	1	1				2
FILIPINO		2,997	17.9	999	924	556	268	114	56	31	15	13	8	2	1	10
JAPANESE		2,365	14.1	891	800	434	151	63	18	3	1			1		3
PUERTO RCN		267	1.6	83	71	57	33	13	6	2	1	1				
KOREAN		289	1.7	114	93	44	23	6	4	3						2
SAMOAN		467	2.8	109	98	89	66	44	25	22	3	1	2	4	4	
NEGRO		326	2.0	110	104	69	30	6	1	3	2					1
PORTUGUESE		158	.9	45	40	39	15	16	1							2
VIETNAMESE		63	.4	21	20	8	5	4	3	1		1				
OTHER		376	2.2	109	102	73	42	22	9	7	7	1				4
UNKNOWN		7		2	2	2										1

TABLE 10

LIVE BIRTHS BY RACE OF MOTHER AND NUMBER OF CHILDREN BORN ALIVE TO MOTHER
STATE OF HAWAII, 1978

RACE OF MOTHER		TOTAL NO. OF BIRTHS		TOTAL NUMBER OF CHILDREN BORN ALIVE												
		NUMBER	PERCENT	-1-	-2	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	12 OR MORE	UNK
ALL RACES	NUMBER	16,717	100.0	7,089	5,240	2,540	1,031	459	152	95	41	19	7	5	7	32
	PERCENT	100.0		42.4	31.3	15.2	6.2	2.7	.9	.6	.2	.1				.2
CAUCASIAN		5,163	30.9	2,399	1,665	715	242	87	28	12	3	2	1		1	8
HAWAIIAN		137	.8	47	29	26	14	8	5	4	2		1			1
PART HAWN		3,493	20.9	1,348	959	596	308	169	50	31	14	6	2	2	2	6
CHINESE		609	3.6	283	205	85	22	9	1	2						2
FILIPINO		2,997	17.9	1,163	994	484	202	77	29	21	13	8	1			5
JAPANESE		2,365	14.1	1,113	823	304	87	28	4	1	1			1		3
PUERTO RCN		267	1.6	97	82	52	23	8	2	1	2					
KOREAN		289	1.7	157	89	28	9	1	4							1
SAMOAN		467	2.8	125	103	87	67	39	21	12	3	2	2	2	4	
NEGRO		326	2.0	136	120	51	11	4	1	1	1					1
PORTUGUESE		158	.9	53	44	40	12	7								2
VIETNAMESE		63	.4	27	19	6	5	2	3			1				
OTHER		376	2.2	139	106	64	29	20	4	10	2					2
UNKNOWN		7		2	2	2										1

TABLE 11

LIVE BIRTHS BY AGE OF MOTHER AND NUMBER OF CHILDREN BORN STATE OF HAWAII, 1978

AGE OF MOTHER	TOTAL	PERCENT	TOTAL NUMBER OF CHILDREN BORN TO MOTHER												
			-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	> 11	UNK
ALL AGES	16,717	100.0	5,764	5,012	3,071	1,500	694	317	164	75	35	18	9	12	46
PERCENT	100.0		34.5	30.0	18.4	9.0	4.2	1.9	1.0	.4	.2	.1	.1	.1	.3
UNDER 15	20	.1	20												
15-17	583	3.5	473	103	5	1									1
18-19	1,487	8.9	951	414	94	19	4								5
20-24	5,493	32.9	2,215	1,862	927	312	108	43	7	2	1				16
25-29	5,351	32.0	1,525	1,661	1,143	580	263	99	46	13	6	3	2	1	9
30-34	2,864	17.1	485	806	709	435	205	115	56	24	10	3	2	6	8
35-39	790	4.7	80	149	179	142	95	44	42	25	14	6	4	3	7
40-44	125	.7	14	16	14	11	19	16	12	11	4	5	1	2	
45-49	3		1						1			1			
OVER 49															
UNKNOWN	1			1											

TABLE 12

LIVE BIRTHS BY AGE OF MOTHER AND NUMBER OF CHILDREN BORN ALIVE STATE OF HAWAII, 1978

AGE OF MOTHER	TOTAL	PERCENT	TOTAL NUMBER OF CHILDREN BORN ALIVE												
			-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-	-11-	> 11	UNK
ALL AGES	16,717	100.0	7,089	5,240	2,540	1,031	459	152	95	41	19	7	5	7	32
PERCENT	100.0		42.4	31.3	15.2	6.2	2.7	.9	.6	.2	.1				.2
UNDER 15	20	.1	20												
15-17	583	3.5	526	54	2										1
18-19	1,487	8.9	1,084	342	53	3									5
20-24	5,493	32.9	2,754	1,887	614	168	48	9	1	1					11
25-29	5,351	32.0	1,939	1,790	980	399	169	40	19	7				1	7
30-34	2,864	17.1	627	956	694	322	149	60	31	7	7	2		3	6
35-39	790	4.7	118	194	175	131	77	24	33	19	8	4	3	2	2
40-44	125	.7	20	16	22	8	16	18	11	6	4	1	2	1	
45-49	3		1					1		1					
OVER 49															
UNKNOWN	1			1											

TABLE 13

SINGLE LIVE BIRTHS BY WEIGHT AT BIRTH AND RACE OF CHILD
STATE OF HAWAII, 1978

WEIGHT AT BIRTH IN GRAMS	ALL RACES		RACE OF CHILD													
	NUMBER	PERCENT	CAU-CASIAN	HAWN	PART HAWN	CHI-NESE	FILI-PINO	JAPA-NESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTU-GUESE	VIET-NAMESE	OTHER	UNKNOWN
TOTAL	16,431	100.0	3,832	49	4,918	558	2,776	2,283	216	241	464	452	145	48	444	5
PREMATURE a/ NUMBER	1,027	6.3	179	8	332	25	237	144	19	11	13	35	6	1	17	
PERCENT b/	6.3	...	1.1		2.0	.2	1.4	.9	.1	.1	.1	.2			.1	
UNDER 500	42	.3	5	1	13	1	10	6	1	1	1	1			2	
501 THRU 1000	46	.3	11		13	2	10	6	1	1		2				
1001 THRU 1500	55	.3	9		19	1	15	9			1	1				
1501 THRU 2000	140	.9	26	1	57		32	11	1	1	1	7	1		2	
2001 THRU 2500	744	4.5	128	6	230	21	170	112	16	8	10	24	5	1	13	
2501 THRU 3000	3,149	19.2	512	4	906	114	742	532	43	46	43	99	29	9	69	1
3001 THRU 3500	6,725	40.9	1,439	19	2,015	265	1,170	1,025	90	108	166	196	54	23	153	2
3501 THRU 4000	4,039	24.6	1,193	10	1,206	124	500	462	50	59	150	88	41	11	143	2
4001 THRU 4500	1,095	6.7	407	6	327	20	82	77	11	10	70	27	13	3	42	
4501 THRU 5000	187	1.1	64		65	2	9	7		4	15	5	1	1	14	
OVER 5000	200	1.2	37	2	64	6	35	36	2	2	7	2	1		6	
UNKNOWN	8		1		2	2	1		1	1						

MEDIAN WEIGHT, LB.OZ. 8- 8 GRAMS 3400

a/INFANTS OF 2500 GRAMS (5 LB 8 OZ) OR LESS ARE CONSIDERED PREMATURE
b/PERCENT OF SINGLE LIVE BIRTHS OF KNOWN WEIGHT

TABLE 14

SINGLE LIVE BIRTHS BY WEIGHT AT BIRTH AND RACE OF MOTHER
STATE OF HAWAII, 1978

WEIGHT AT BIRTH IN GRAMS	ALL RACES		RACE OF MOTHER													
	NUMBER	PERCENT	CAU-CASIAN	HAWN	PART HAWN	CHI-NESE	FILI-PINO	JAPA-NESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTU-GUESE	VIET-NAMESE	OTHER	UNKNOWN
TOTAL	16,431	100.0	5,063	133	3,433	598	2,962	2,323	260	285	458	320	154	63	372	7
PREMATURE a/ NUMBER	1,027	6.3	251	14	245	25	240	150	26	16	10	29	5	1	15	
PERCENT b/	6.3	...	1.5	.1	1.5	.2	1.5	.9	.2	.1	.1	.2			.1	
UNDER 500	42	.3	9	1	10	2	8	8	1		1	1			1	
501 THRU 1000	46	.3	11		12	3	8	7	1	2		2				
1001 THRU 1500	55	.3	12	2	11		16	7	1	4	1	1				
1501 THRU 2000	140	.9	34	1	43	1	37	12		1		7	1		3	
2001 THRU 2500	744	4.5	195	10	169	19	171	116	23	9	8	18	4	1	11	
2501 THRU 3000	3,149	19.2	693	14	640	137	770	563	57	50	46	74	32	12	59	2
3001 THRU 3500	6,725	40.9	1,943	52	1,405	271	1,262	1,044	110	127	153	143	54	28	130	3
3501 THRU 4000	4,039	24.6	1,562	34	805	129	552	445	49	74	152	54	47	16	118	2
4001 THRU 4500	1,095	6.7	484	12	240	26	90	77	13	12	72	14	13	5	37	
4501 THRU 5000	187	1.1	75	2	50	2	13	8		3	18	4	2	1	9	
OVER 5000	200	1.2	52	5	45	6	35	36	4	3	7	2	1		4	
UNKNOWN	8		3		2	2			1							

MEDIAN WEIGHT, LB.OZ. 8- 8 GRAMS 3400

a/INFANTS OF 2500 GRAMS (5 LB 8 OZ) OR LESS ARE CONSIDERED PREMATURE
b/PERCENT OF SINGLE LIVE BIRTHS OF KNOWN WEIGHT

TABLE 15

SINGLE MALE LIVE BIRTHS BY WEIGHT AND GESTATION PERIOD
STATE OF HAWAII, 1978

WEIGHT AT BIRTH IN GRAMS		TOTAL	PERCENT	GESTATION PERIOD IN WEEKS						
				UNDER 20	20-27	28-35	36-39	40	OVER 40	UN-KNOWN
TOTAL		8,619	100.0	5	40	520	3,613	1,680	2,555	206
PREMATURE a/	NUMBER	513	6.0	1	30	213	174	26	48	21
	PERCENT b/	6.0	...		.3	2.5	2.0	.3	.6	.2
UNDER 500		25	.3	1	6	5	7	4		2
501 THRU 1000		25	.3		16	4			1	4
1001 THRU 1500		33	.4		3	27	1		1	1
1501 THRU 2000		77	.9		3	51	15	1	3	4
2001 THRU 2500		353	4.1		2	126	151	21	43	10
2501 THRU 3000		1,491	17.3	1	4	123	811	233	278	41
3001 THRU 3500		3,394	39.4		2	104	1,586	692	941	69
3501 THRU 4000		2,282	26.5	3	2	51	806	512	862	46
4001 THRU 4500		704	8.2		2	18	169	167	327	21
4501 THRU 5000		118	1.4			2	23	23	63	7
OVER 5000		113	1.3			8	42	26	36	1
UNKNOWN		3				1	1	1		

MEDIAN WEIGHT, LB.OZ. 8-10 GRAMS 3449

a/ INFANTS OF 2500 GRAMS (5 LB 8 OZ) OR LESS ARE CONSIDERED PREMATURE
b/ PERCENT OF SINGLE LIVE BIRTHS OF KNOWN WEIGHT

TABLE 16

SINGLE FEMALE LIVE BIRTHS BY WEIGHT AND GESTATION PERIOD
STATE OF HAWAII, 1978

WEIGHT AT BIRTH IN GRAMS		TOTAL	PERCENT	GESTATION PERIOD IN WEEKS						
				UNDER 20	20-27	28-35	36-39	40	OVER 40	UN-KNOWN
TOTAL		7,812	100.0	2	45	390	3,003	1,594	2,571	207
PREMATURE a/	NUMBER	514	6.6	2	25	139	219	50	65	14
	PERCENT b/	6.6			.3	1.8	2.8	.6	.8	.2
UNDER 500		17	.2	2	5	3	3	1	2	1
501 THRU 1000		21	.3		11	9				1
1001 THRU 1500		22	.3		3	18		1		
1501 THRU 2000		63	.8		1	35	16	4	6	1
2001 THRU 2500		391	5.0		5	74	200	44	57	11
2501 THRU 3000		1,658	21.2		5	103	816	286	403	45
3001 THRU 3500		3,331	42.6		6	102	1,302	744	1,089	88
3501 THRU 4000		1,757	22.5		5	35	513	400	761	43
4001 THRU 4500		391	5.0		2	6	94	87	189	13
4501 THRU 5000		69	.9			1	18	13	35	2
OVER 5000		87	1.1		1	3	40	13	29	1
UNKNOWN		5	.1		1	1	1	1		1

MEDIAN WEIGHT, LB.OZ. 7- 6 GRAMS 3346

a/ INFANTS OF 2500 GRAMS (5 LB 8 OZ) OR LESS ARE CONSIDERED PREMATURE
b/ PERCENT OF SINGLE LIVE BIRTHS OF KNOWN WEIGHT

TABLE 17

LIVE BIRTHS BY RACE, SEX, PLURALITY OF BIRTH, AND PREMATURITY
STATE OF HAWAII, 1978

RACE OF CHILD	SINGLE AND PLURAL BIRTHS				SINGLE MALE BIRTHS			SINGLE FEMALE BIRTHS			PLURAL MALE BIRTHS			PLURAL FEMALE BIRTHS		
	TOTAL NO. OF BIRTHS	MALE	FEMALE	RATIO[a]	TOTAL	PREMATURE[b] NO.	PREMATURE[b] PERCENT[c]	TOTAL	PREMATURE[b] NO.	PREMATURE[b] PERCENT[c]	TOTAL	PREMATURE[b] NO.	PREMATURE[b] PERCENT[c]	TOTAL	PREMATURE[b] NO.	PREMATURE[b] PERCENT[c]
ALL RACES	16,717	8,767	7,950	110.2	8,619	540	6.3	7,812	545	7.0	148	75	50.7	138	84	60.9
CAUCASIAN	3,909	2,012	1,897	106.0	1,976	93	4.7	1,856	93	5.0	36	18	50.0	41	31	75.6
HAWAIIAN	53	33	20	165.0	30	6	20.0	19	2	10.5	3	2	66.7	1		
PART HAWN	5,001	2,571	2,430	105.8	2,532	176	7.0	2,386	172	7.2	39	17	43.6	44	25	56.8
CHINESE	566	296	270	109.6	292	8	2.7	268	19	7.1	4	2	50.0	2		
FILIPINO	2,825	1,507	1,318	114.3	1,491	124	8.3	1,299	128	9.9	16	11	68.8	19	15	78.9
JAPANESE	2,345	1,242	1,103	112.6	1,215	85	7.0	1,085	72	6.6	27	12	44.4	18	10	55.6
PUERTO RCN	226	120	106	113.2	116	6	5.2	105	17	16.2	4	3	75.0	1		
KOREAN	244	137	107	128.0	137	7	5.1	105	5	4.8				2		
SAMOAN	486	262	224	116.9	252	10	4.0	219	5	2.3	10	4	40.0	5		
NEGRO	458	257	201	127.8	252	19	7.5	200	18	9.0	5	4	80.0	1		
PORTUGESE	150	90	60	150.0	89	1	1.1	57	5	8.8	1			3	3	100.0
VIETNAMESE	48	26	22	118.1	26			22	1	4.5						
OTHER	401	213	188	113.2	210	5	2.4	187	8	4.3	3	2	66.7	1		
UNKNOWN	5	1	4	25.0	1			4								

[a] NUMBER OF MALES PER 100 FEMALES
[b] INFANTS OF 2500 GRAMS (5 LB 8 OZ) OR LESS ARE CONSIDERED PREMATURE
[c] PERCENT OF BIRTHS OF KNOWN WEIGHT ONLY

TABLE 18

LIVE BIRTHS BY RACE AND AGE OF MOTHER
STATE OF HAWAII, 1978

RACE OF MOTHER		ALL AGES		AGE OF MOTHER IN YEARS										
		NUMBER	PERCENT	10-14	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	OVER 49	UNKNOWN
ALL RACES	NUMBER	16,717	100.0	20	583	1,487	5,493	5,351	2,864	790	125	3		1
	PERCENT	100.0		.1	3.5	8.9	32.9	32.0	17.1	4.7	.7			
CAUCASIAN		5,163	30.9	3	123	397	1,833	1,683	872	226	26			
HAWAIIAN		137	.8		6	21	51	33	16	7	3			
PART HAWN		3,493	20.9	14	244	525	1,361	854	360	108	26	1		
CHINESE		609	3.6	1	4	16	122	255	175	30	5			1
FILIPINO		2,997	17.9	1	111	254	952	915	519	208	36	1		
JAPANESE		2,365	14.1		33	112	422	986	663	132	16	1		
PUERTO RCN		267	1.6		16	30	116	70	27	8				
KOREAN		289	1.7		3	12	80	117	55	21	1			
SAMOAN		467	2.8		13	34	188	150	57	19	6			
NEGRO		326	2.0		11	41	163	79	28	3	1			
PORTUGUESE		153	.9		1	17	59	48	28	5				
VIETNAMESE		63	.4		3	3	10	28	16	2	1			
OTHER		376	2.2	1	15	22	135	131	47	21	4			
UNKNOWN		7				3	1	2	1					

TABLE 19

LIVE BIRTHS BY AGE OF FATHER AND OF MOTHER
STATE OF HAWAII, 1978

AGE OF FATHER		ALL AGES		AGE OF MOTHER IN YEARS										
		NUMBER	PERCENT	< 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	OVER 49	UNKNOWN
ALL AGES	NUMBER	16,717	100.0	20	583	1,487	5,493	5,351	2,864	790	125	3		1
	PERCENT	100.0		.1	3.5	8.9	32.9	32.0	17.1	4.7	.7			
< 15		2		1	1									
15-17		79	.5	2	49	21	6	1						
18-19		436	2.6		112	232	87	3	2					
20-24		3,644	21.8	1	153	667	2,390	382	44	6				1
25-29		4,752	28.4		27	130	1,721	2,521	299	50	4			
30-34		3,707	22.2		4	50	470	1,597	1,452	125	9			
35-39		1,516	9.1		3	13	125	382	663	313	17			
40-44		511	3.1		1	2	42	105	171	149	41			
45-49		200	1.2			2	21	34	63	53	25	2		
50-54		83	.5			2	8	16	23	25	8	1		
55-59		37	.2		1		5	12	8	10	1			
60-64		35	.2				5	9	9	9	3			
OVER 64		77	.5				7	25	22	16	7			
UNKNOWN		1,638	9.8	16	232	368	606	264	108	34	10			

MEDIAN AGE OF KNOWN FATHERS = 29
MEDIAN AGE OF ALL MOTHERS = 26

TABLE 20

ILLEGITIMATE LIVE BIRTHS BY PLACE OF OCCURRENCE REALLOCATED TO PLACE OF RESIDENCE AND RACE OF MOTHER
STATE OF HAWAII, 1978

GEOGRAPHIC AREA	PLACE OF OCCURRENCE	BIRTH BY PLACE OF RESIDENCE		RACE OF MOTHER														
		NO.	RATE*	CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERT RICAN	KOREAN	SAMOAN	NEGRO	PORTUGESE	VIETMESE	OTHER	UNKNOWN
TOTAL RECORDED	2686	2686	160.2	598	43	1133	24	374	155	75	26	113	41	37	10	53	4
STATE OF HAWAII	2686	2677	160.1	591	43	1132	24	374	154	75	26	113	41	37	10	53	4
COUNTY OF HAWAII	331	330	192.6	97	9	130		40	23	12	1		1	5		11	1
CITY OF HILO	215	130	205.7	23	7	59		19	10	7				1		3	1
BALANCE OF COUNTY	116	200	185.0	74	2	71		21	13	5	1		1	4		8	
COUNTY OF HONOLULU	2011	1996	153.5	366	24	875	22	298	108	53	25	113	40	25	10	34	3
CITY OF HONOLULU	1769	858	163.9	165	8	337	12	125	63	21	15	64	12	13	7	16	
BALANCE OF COUNTY	242	1138	146.5	201	16	538	10	173	45	32	10	49	28	12	3	18	3
COUNTY OF KALAWAO																	
COUNTY OF KAUAI	125	124	163.6	41	2	40		21	14	3						3	
ISLAND OF KAUAI	125	124	164.0	41	2	40		21	14	3						3	
ISLAND OF NIIHAU	--	--	--														
COUNTY OF MAUI	218	227	182.9	87	8	87	2	15	9	7				7		5	
ISLAND OF LANAI	1	2	83.3					1	1								
ISLAND OF MAUI	193	195	177.1	85	7	64	1	12	8	7				7		4	
ISLAND OF MOLOKAI (EXCL. KALAWAO)	24	30	258.6	2	1	23	1	2								1	
NONRESIDENT		8	181.8	7					1								
UNKNOWN RESIDENCE	1	1	--			1											

*NUMBER OF BIRTHS PER 1,000 RESIDENT POPULATION

TABLE 21

ILLEGITIMATE LIVE BIRTHS BY WEIGHT AT BIRTH AND RACE OF CHILD
STATE OF HAWAII, 1978

WEIGHT AT BIRTH IN GRAMS	ALL RACES		RACE OF CHILD													
	NUMBER	PERCENT	CAU-CASIAN	HAWN	PART HAWN	CHI-NESE	FILI-PINO	JAPA-NESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTU-GUESE	VIET-NAMESE	OTHER	UNKNOWN
TOTAL	2,677	100.0	449	28	1,340	20	329	130	74	21	113	59	39	9	62	4
PREMATURE a/ NUMBER	269	10.0	38	6	131	1	50	19	10	1	4	4	3		2	
PREMATURE PERCENT b/	10.0	...	1.4	.2	4.9		1.9	.7	.4		.1	.1	.1		.1	
UNDER 500	12	.4	1	1	5		5									
501 THRU 1000	22	.8	3		12	1	4	1		1						
1001 THRU 1500	19	.7	2		6		7	2			1	1				
1501 THRU 2000	43	1.6	5	1	29		6	1			1					
2001 THRU 2500	173	6.5	27	4	79		28	15	10		2	3	3		2	
2501 THRU 3000	610	22.8	81	3	307	6	110	33	17	1	12	13	11	2	13	1
3001 THRU 3500	1,102	41.2	187	11	557	10	116	55	34	14	47	26	15	4	24	2
3501 THRU 4000	503	18.8	107	6	252	2	42	16	7	3	28	14	6	1	18	1
4001 THRU 4500	134	5.0	29		61		7	6	4	1	16	2	3	1	4	
4501 THRU 5000	24	.9	3		12		1				5		1	1	1	
OVER 5000	31	1.2	4	2	18		3	1	1	1	1					
UNKNOWN	3	.1			1	1			1							

MEDIAN WEIGHT, LB.OZ. 7- 4 GRAMS 3278

a/INFANTS OF 2500 GRAMS (5 LB 8 OZ) OR LESS ARE CONSIDERED PREMATURE
b/PERCENT OF SINGLE LIVE BIRTHS OF KNOWN WEIGHT

TABLE 22

ILLEGITIMATE LIVE BIRTHS BY RACE AND AGE OF MOTHER
STATE OF HAWAII, 1978

RACE OF MOTHER		ALL AGES		AGE OF MOTHER IN YEARS										
		NUMBER	RATIO*	< 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	OVER 49	UNKNOWN
ALL RACES	NUMBER	2,677	160.1	20	387	589	986	442	189	51	13			
	RATIO*	160.1	...	1000.0	663.8	396.1	179.5	82.6	66.0	64.6	104.0			
CAUCASIAN		591	114.5	3	65	87	206	130	75	20	5			
HAWAIIAN		43	313.9		5	15	15	6	2					
PART HAWN		1,132	324.1	14	188	294	421	144	53	12	6			
CHINESE		24	39.4	1	2	7	4	7	1	2				
FILIPINO		374	124.8	1	67	93	141	42	24	6				
JAPANESE		154	65.1		22	40	47	32	9	3	1			
PUERTO RCN		75	280.9		13	9	36	11	5	1				
KOREAN		26	90.0		3	3	9	6	4	1				
SAMOAN		113	242.0		9	18	48	25	8	4	1			
NEGRO		41	125.8		5	5	19	9	3					
PORTUGUESE		37	234.2		1	9	15	10	2					
VIETNAMESE		10	158.7			1	2	5	2					
OTHER		53	141.0	1	7	6	22	14	1	2				
UNKNOWN		4	571.4			2	1	1						

* NUMBER OF ILLEGITIMATE BIRTHS PER 1000 LIVE BIRTHS IN SPECIFIED GROUP.

TABLE 23

TOTAL DEATHS BY PLACE OF OCCURRENCE REALLOCATED TO USUAL RESIDENCE BY RACE
STATE OF HAWAII, 1978[a]

GEOGRAPHIC AREA	TOTAL BY PLACE OF OCCURR	TOTAL BY PLACE OF RESIDENCE		ALL RACES		RACE													
		NUMBER	RATE[b]	MALE	FEMALE	CAUCASIAN	HAWN	PT. HAWN	CHINESE	FILIPINO	JAPANESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTUGUESE	VIETNAMESE	OTHER RACES	UNKNOWN
TOTAL RECORDED	4860	4860	--	2960	1900	1491	182	603	268	601	1334	67	74	43	40	117	1	37	2
STATE OF HAWAII	4852	4508	5.0	2719	1790	1214	179	599	260	595	1322	67	70	38	29	116	1	18	
CTY OF HAWAII	504	521	6.4	331	190	110	34	65	5	88	169	8	2		1	38		1	
CITY OF HILO	348	210	--	115	95	40	12	27	2	20	83	8	2			15		1	
BALANCE OF CTY	156	311	--	216	95	70	22	38	3	68	86				1	23			
CTY OF HONOLULU	3679	3325	4.6	1987	1338	942	110	453	250	366	942	47	67	38	27	68	1	14	
CITY-HONOLULU	3014	1991	--	1166	825	582	47	221	200	173	618	22	47	22	12	39	1	7	
BALANCE OF CTY	665	1334	--	821	513	360	63	232	50	193	324	25	20	16	15	29		7	
CTY OF KALAWAO																			
CTY OF KAUAI	237	235	6.8	137	98	47	10	27		71	76	2	1					1	
ISL OF KAUAI	237	233	6.8	136	97	47	8	27		71	76	2	1					1	
ISL OF NIIHAU		2	7.5	1	1		2												
CTY OF MAUI	432	427	7.0	263	164	115	25	54	5	70	135	10			1	10		2	
ISL OF LANAI	6	10	4.7	5	5	1	1	1		5	1	1							
ISL OF MAUI	401	374	7.1	227	147	113	23	40	5	44	130	9			1	8		1	
ISL OF MOLOKAI (EXCL KALAWAO)	25	43	6.7	31	12	1	1	13		21	4					2		1	
NONRESIDENT	8	348	--	238	110	276	2	4	8	6	12		4	5	11	1		19	
UNKNOWN		4	--	4		1	1												2

[a] EXCLUDES DEATHS OF HAWAII RESIDENTS OCCURRING AND RECORDED IN OTHER REGISTRATION AREAS
[b] RATE OF DEATH PER 1,000 RESIDENT POPULATION

TABLE 24

RESIDENT DEATHS BY PLACE AND MONTH OF OCCURRENCE
STATE OF HAWAII, 1978

PLACE OF OCCURRENCE		MONTH OF OCCURRENCE												
		TOTAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
STATE OF HAWAII	NUMBER	4508	415	373	408	345	397	367	318	392	339	374	388	392
	PERCENT	100.0	9.2	8.3	9.1	7.7	8.8	8.1	7.1	8.7	7.5	8.3	8.6	8.7
CTY OF HAWAII		472	42	41	46	39	38	40	33	45	30	37	37	44
CITY OF HILO		333	25	35	32	26	28	32	20	28	24	28	23	32
BALANCE OF CTY		139	17	6	14	13	10	8	13	17	6	9	14	12
CTY OF HONOLULU		3445	310	283	306	266	299	287	237	299	279	280	295	304
CITY-HONOLULU		2804	251	233	250	213	241	226	185	252	235	239	231	248
BALANCE OF CTY		641	59	50	56	53	58	61	52	47	44	41	64	56
CTY OF KALAWAO														
CTY OF KAUAI		213	24	10	20	22	19	13	16	20	12	24	20	13
ISL OF KAUAI		213	24	10	20	22	19	13	16	20	12	24	20	13
ISL OF NIIHAU														
CTY OF MAUI		378	39	39	36	18	41	27	32	28	18	33	35	31
ISL OF LANAI		6			1		1			1		1	1	1
ISL OF MAUI		348	38	36	32	16	38	26	30	25	18	30	33	26
ISL OF MOLOKAI (EXCL KALAWAO)		24	1	3	3	2	2	1	2	2		2	2	4

TABLE 25

RESIDENT DEATHS BY PLACE OF OCCURRENCE, AGE, AND SEX
STATE OF HAWAII, 1978

PLACE OF OCCURRENCE	ALL AGES			AGE AND SEX																			
	TOTAL	MALE	FE-MALE	UNDER 1		1 - 4		5 - 14		15 - 17		18 - 24		25 - 44		45 - 64		65 - 74		75 & OVER		UNKNOWN	
				M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
STATE OF HAWAII	4508	2718	1790	110	75	17	12	16	14	24	7	115	26	255	90	703	414	625	350	851	802	1	
CTY OF HAWAII	472	301	171	2	8		1	2		2	1	12	2	34	8	56	36	75	38	118	77		
CITY OF HILO	333	195	138	2	6		1			2		9	2	15	4	37	28	46	32	84	65		
BALANCE OF CTY	139	106	33		2			2			1	3		19	4	19	9	29	6	34	12		
CTY OF HONOLULU	3445	2047	1398	104	61	16	11	12	12	20	5	88	20	186	71	567	324	454	267	599	627	1	
CITY-HONOLULU	2804	1633	1171	91	58	14	9	12	9	17	5	44	16	139	60	447	269	370	228	498	517	1	
BALANCE OF CTY	641	414	227	13	3	2	2		3	3		44	4	47	11	120	55	84	39	101	110		
CTY OF KALAWAO																							
CTY OF KAUAI	213	128	85	4	2				1			6	3	7	5	25	19	29	16	57	39		
ISL OF KAUAI	213	128	85	4	2				1			6	3	7	5	25	19	29	16	57	39		
ISL OF NIIHAU																							
CTY OF MAUI	378	242	136		4	1		2	1	2	1	9	1	29	6	55	35	67	29	77	59		
ISL OF LANAI	6	5	1															4	1	1			
ISL OF MAUI	348	217	131		4	1		1	1	1	1	9	1	25	6	54	33	57	26	69	59		
ISL OF MOLOKAI (EXCL KALAWAO)	24	20	4					1		1				4		1	2	6	2	7			

TABLE 26

RESIDENT DEATHS BY AGE AND RACE
STATE OF HAWAII, 1978

AGE IN YEARS	ALL RACES			RACE													
	TOTAL	MALE	FEMALE	CAUCASIAN	HAWN	PT. HAWN	CHI-NESE	FILI-PINO	JAPA-NESE	PUERTO RICAN	KO-REAN	SA-MOAN	NEGRO	PORTUGUESE	VIETNA-MESE	OTHER RACES	UN-KNOWN
ALL AGES	4508	2718	1790	1214	179	599	260	595	1322	67	70	38	29	116	1	18	
UNDER 1	185	110	75	34	1	69	1	33	26	7	3	4	4	2		1	
1 - 4	29	17	12	10		7	1	4	3		1	1	2				
5 - 14	30	16	14	3	1	13		6	3		1		2			1	
15 - 17	31	24	7	3	1	12		7	3	2		2				1	
18 - 19	36	31	5	10		16		1	5	1	1		1			1	
20 - 24	105	84	21	42	2	18	1	12	15	2	1	2	5			5	
25 - 34	170	131	39	79		29	4	17	28	2	4	2	1	4			
35 - 44	176	125	51	57	12	35	8	12	32	6	2	5	2	3		2	
45 - 54	370	220	150	97	16	71	17	46	96	5	4	3	1	10	1	3	
55 - 64	747	483	264	219	36	128	42	55	202	11	14	7	5	26		2	
65 - 74	975	625	350	262	68	106	49	178	240	13	11	6	5	35		2	
75 & OVER	1653	851	802	397	42	95	137	224	669	18	28	6	1	36			
UNKNOWN	1	1		1													

TABLE 27

TOTAL RESIDENT DEATHS RECORDED IN HAWAII BY AGE GROUPS FOR DELECTED YEARS
STATE OF HAWAII: 1958, 1968, AND 1978

AGE IN YEARS	1958[a]		1968[a]		1978	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
ALL AGES	3,194	100.0	4,113	100.0	4,508	100.0
Under 1	386	12.1	264	6.4	185	4.1
1 - 4	51	1.6	45	1.1	29	.6
5 - 9	26	.8	39	.9	17	.4
10 - 14	26	.8	22	.5	13	.3
15 - 19	33	1.0	58	1.4	67	1.5
20 - 24	43	1.3	68	1.7	105	2.3
25 - 34	100	3.1	117	2.8	170	3.8
35 - 44	178	5.6	221	5.4	176	3.9
45 - 54	332	10.4	478	11.6	370	8.2
55 - 64	508	15.9	715	17.4	747	16.6
65 - 74	656	20.5	862	21.0	975	21.6
75 - 84	627	19.6	818	19.9	1,007	22.3
85 & over	228	7.1	404	9.8	646	14.3
Unknown	--	--	2	--	1	--

MEDIAN AGE AT DEATH 1958: 63.4 years; 1968: 65.3 years; 1978: 68.8 years

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[a] Source: Vital Statistics of the United States

TABLE 28

RESIDENT DEATHS BY AGE, SEX, AND MARITAL STATUS
STATE OF HAWAII, 1978

AGE IN YEARS	NUMBER BY MARITAL STATUS											
	MALE						FEMALE					
	TOTAL	SIN	MAR	WID	DIV	UNK	TOTAL	SIN	MAR	WID	DIV	UNK
ALL AGES	2718	608	1484	373	235	18	1790	210	621	847	112	
UNDER 15	143	139	2			2	101	101				
15 - 17	24	24					7	7				
18 - 19	31	29	2				5	5				
20 - 24	84	67	15		1	1	21	11	10			
25 - 34	131	64	49		18		39	16	18		5	
35 - 44	125	24	71	2	27	1	51	4	37	1	9	
45 - 54	220	38	145	5	31	1	150	6	111	15	18	
55 - 64	483	50	344	30	59		264	8	174	52	30	
65 - 74	625	86	410	66	58	5	350	21	150	157	22	
75 - 84	531	65	298	133	32	3	476	14	101	336	25	
85 & OVER	320	22	148	137	9	4	326	17	20	286	3	
UNKNOWN	1					1						

TABLE 29

LEADING CAUSES OF DEATH FOR 1978 AND COMPARATIVE DATA FOR SELECTED YEARS
State of Hawaii, 1948-1978

	Rank	1978			1968			1958			1948		
		No.[a]	Rate	Percent	No.[b]	Rate	Percent	No.[b]	Rate	Percent	No.[b]	Rate	Percent
All Causes	...	4,508	502.8	100.0	4,192	584.1	100.0	3,128	543.3	100.0	3,104	574.3	100.0
Diseases of the Heart (390-398, 402, 404, 410-429	1	1,441	160.7	32.0	1,374	191.5	32.8	1,032	179.2	33.0	614	113.6	19.8
Malignant Neoplasms (140-209)..	2	1,015	113.2	22.5	800	111.5	19.1	552	95.9	17.7	441	81.6	14.2
Cerebrovascular Diseases (430-438)	3	445	49.6	10.0	351	48.9	8.4	262	45.5	8.4	210	38.9	6.8
All Accidents (E800-949)	4	280	31.2	6.2	274	38.2	6.5	158	27.6	5.1	262	48.5	8.4
Influenza and Pneumonia (470-474, 480-486)...........	5	145	16.1	3.2	175	24.2	4.2	118	20.5	3.8	128	23.7	4.1
Diabetes Mellitus (250)	6	119	13.3	2.6	100	13.9	2.4	69	12.0	2.2	104	19.2	3.4
Suicide (E950-959	7	106	11.8	2.4	58	8.1	1.4	57	9.9	1.8	53	9.8	1.7
Certain Causes of Mortality in Early Infancy (760-778) ..	8	87	9.7	1.9	169	23.5	4.0	260	45.2	8.3	268	49.6	8.6
Cirrhosis of Liver (571)	9	65	7.2	1.4	65	9.1	1.6	39	6.8	1.2	35	6.5	1.1
Congenital Anomalies (740-759)	10	56	6.2	1.2	72	10.0	1.7	76	13.2	2.4	61	11.3	2.0
Homicide and Legal Intervention (E960-E978)	11	55	6.1	1.2	22	3.1	0.5	15	2.6	0.6	29	5.4	0.9
Bronchitis, Emphysema and Asthma (490-493)............	12	48	5.3	1.1	86	12.0	2.1	[c]34	[c]5.8	[c]1.1	[c]14	[c]2.6	[c]0.5
All Other Causes	...	646	72.1	14.3	646	90.0	15.4	456	77.9	14.6	885	163.7	28.5

[a] Resident deaths only (including resident military personnel)
[b] Deaths in 1948, 1958 and 1968 are civilian deaths only.
[c] Does not include Emphysema

TABLE 30

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
STATE OF HAWAII 1978

CAUSES OF DEATH	TOTAL		ALL AGES		UNDER 1 YR.		1-4 YRS.		5-9 YRS.		10-14 YRS.		15-17 YRS.		18-19 YRS.		20-24 YRS.		25-29 YRS.		30-34 YRS.		35-39 YRS.	
	NUMBER	RATE*	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	4508	502.8	2718	1790	110	75	17	12	7	10	9	4	24	7	31	5	84	21	68	23	63	16	56	20
TUBERCULOSIS, ALL FORMS (010-019)	7	.8	5	2									1								1			
SYPHILIS AND ITS SEQUELAE (090-097)	1	.1		1																				
OTHER INFECTIVE & PARASITIC DISEASES (000-136)	46	5.1	30	16	6	4	1												1					
MALIGNANT NEOPLASMS (140-209)	1015	113.2	588	427		1	3		2	2	1		3				2		7	3	2	1	10	9
DIGEST. ORGANS (150-159)	356	39.7	222	134													1		1		1		4	
RESPIRATORY SYSTEM (160-163)	240	26.8	171	69																			4	
BREAST (174)	79	8.8	1	78																		1		4
GENITAL ORGANS (180-187)	94	10.5	46	48															1	1				
URINARY ORGANS (188-189)	38	4.2	24	14																				
LEUKEMIA (204-207)	39	4.3	23	16		1	2		2	1							1		2				1	2
OTHER (140-209)	169	18.8	101	68			1			1	1		3						3	2	1		1	3
DIABETES MELLITUS (250)	119	13.3	56	63																1		1		1
DISEASE OF CIRCULATORY SYSTEM (390-458)	1995	222.5	1170	825	1	2		2		1	4	2			1		2	4	6	1	7	2	15	4
DISEASES OF HEART (390-398,402,404,410-429)	1441	160.7	866	575	1	1		2		1	2				1		2	1	1		5	1	13	2
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)	31	3.5	13	18							1											1		
HYPERTENSIVE HEART (402,404)	24	2.7	13	11																			2	
ISCHEMIC HEART (410-414)	1260	140.5	771	489														1	1		5		9	2
OTHER HEART DISEASE (420-429)	126	14.0	69	57	1	1		2		1	1				1		2						2	
HYPERTENSION (400,401,403)	14	1.6	8	6																				
CEREBROVASCULAR DISEASE (430-438)	445	49.6	233	212		1					2	2						3	4	1	2	1	1	2
ARTERIOSCLEROSIS (440)	35	3.9	19	16																				
OTHER CIRCULATORY (441-458)	60	6.7	44	16															1				1	
INFLUENZA/PNEUMONIA (470-474,480-486)	145	16.1	94	51	5	2	1	1		1		1	1		1		1				1		1	
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)	48	5.3	26	22												1		1	1	1				
PEPTIC ULCER (531-533)	15	1.7	9	6							1													
CIRRHOSIS OF LIVER (571)	65	7.2	37	28																1			1	
NEPHRITIS AND NEPHROSIS (580-584)	22	2.4	11	11									1											
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)	1	.1		1														1						
CONGENITAL ANOMALIES (740-759)	56	6.2	28	28	23	24	2	1		1			1				1							
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)	87	9.7	55	32	55	32																		
SYMPTOMS & ILL-DEFINED COND. (780-796)	49	5.5	32	17	12	5											1		1		3	1	1	
ALL OTHER DISEASES (RESIDUAL) (000-796)	351	39.1	198	153	6	5	1	4		1		1		1	2	2	2	2	4	2	7	4	5	2
ACCIDENTAL DEATHS (800-949)	280	31.2	223	57	2		8	3	4	3	2		12	5	14	1	52	5	28	6	14	4	11	2
MOTOR VEHICLE (810-823)	190	21.2	147	43			2	2	3	3	2		11	4	12	1	39	5	18	5	10	4	4	2
OTHER TRANS. (800-807,825-845)	3	.3	3														1		2					
POISONING (850-877)	4	.4	4												1		1				1			
FALLS (880-887)	30	3.3	24	6			1										4		2	1	1		1	
FIRES (890-899)																								
DROWNING & SUBMERSIONS (910)	24	2.7	22	2			4		1					1	1		3		3		1		3	
FIREARM MISSILES (922)	1	.1	1														1							
OTHER ACCIDENTS (800-949)	28	3.1	22	6	2		1	1					1				3		3		1		3	
SUICIDE (950-959)	106	11.8	85	21									2	1	12		12	2	8	1	14	2	7	
HOMICIDE & LEGAL INTERVENTION (960-978)	55	6.1	39	16					1	1			1		1	1	8	6	3	2	9	1	3	1
ALL OTHER EXTERNAL CAUSES (980-999)	45	5.0	32	13			1	1			1		2				3		9	5	5		2	1

*RATE PER 100,000 TOTAL RESIDENT POPULATION

TABLE 30 (CONT'D)

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
STATE OF HAWAII 1978

	40-44 YRS.		45-49 YRS.		50-54 YRS.		55-59 YRS.		60-64 YRS.		65-69 YRS.		70-74 YRS.		75-79 YRS.		80-84 YRS.		OVER 84		UN-KNOWN	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	69	31	78	51	142	99	200	122	283	142	324	145	301	205	303	220	228	256	320	326	1	
TUBERCULOSIS, ALL FORMS (010-019)			1										1				1	2				
SYPHILIS AND ITS SEQUELAE (090-097)																		1				
OTHER INFECTIVE & PARASITIC DISEASES (000-136)	1	1	1		1	1	1		3		4		2	2	4	2	2	1	3	5		
MALIGNANT NEOPLASMS (140-209)	16	15	17	18	47	48	56	53	92	56	92	37	79	58	78	52	45	43	36	31		
DIGEST. ORGANS (150-159)	5	3	9	2	16	12	20	12	36	15	35	12	34	21	32	24	13	18	15	15		
RESPIRATORY SYSTEM (160-163)	7	3	4	4	16	10	25	9	29	13	29	7	22	8	18	5	9	7	8	3		
BREAST (174)		5		6		13		15		8	1	7		10		3		3		3		
GENITAL ORGANS (180-187)		3		2		2	2	10	4	9	7	3	7	10	11	4	7	3	7	1		
URINARY ORGANS (188-189)			1		3	1			4		2	2	1	1	5	6	7	1	1	2		
LEUKEMIA (204-207)	1			2	2	2		2	5		2	1	3	2	2	2		1				
OTHER (140-209)	3	1	3	2	10	8	9	5	14	11	16	5	12	6	10	8	9	10	5	6		
DIABETES MELLITUS (250)	1				3	1	6	2	12	5	8	4	5	15	7	11	8	15	6	7		
DISEASE OF CIRCULATORY SYSTEM (390-458)	23	3	36	21	56	26	96	48	124	56	149	68	165	100	163	116	135	147	188	222		
DISEASES OF HEART (390-398,402,404,410-429)	16	2	30	13	51	19	78	34	98	42	112	49	112	66	113	90	92	103	139	149		
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)					1	2	1	1	1	4	2	1	3	2	3	3		4	1			
HYPERTENSIVE HEART (402,404)						1	2		1	2	3	2	1	2	1		1	3	2	1		
ISCHEMIC HEART (410-414)	16	1	26	8	44	15	71	29	90	34	103	39	103	57	102	77	83	92	118	134		
OTHER HEART DISEASE (420-429)		1	4	5	6	1	4	4	6	2	4	7	5	5	7	10	8	4	18	14		
HYPERTENSION (400,401,403)			1		1		1	1	1			1	2	1	2			1		2		
CEREBROVASCULAR DISEASE (430-438)	6		3	8	3	5	14	11	16	13	27	16	43	29	42	22	35	39	35	59		
ARTERIOSCLEROSIS (440)			1						2		2		1	2	2	3	4	2	7	9		
OTHER CIRCULATORY (441-458)	1	1	1		1	2	3	2	7	1	7	2	7	2	4	1	4	2	7	3		
INFLUENZA/PNEUMONIA (470-474,480-486)	1				4	1	2		7	1	12	3	7	4	11	7	10	11	29	19		
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)		1		1	2	2	1		3	1	4	1	4	1	1	6	5	3	5	3		
PEPTIC ULCER (531-533)							1	1			2	3	1	1	1	1			3			
CIRRHOSIS OF LIVER (571)	3	3	5	2	4	4	4	5	9	5	4	2	2		2	2	3	4				
NEPHRITIS AND NEPHROSIS (580-594)					1	1			3	2		1	1	1	2	2	1	3	2	1		
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)																						
CONGENITAL ANOMALIES (740-759)		1									1	1										
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)																						
SYMPTOMS & ILL-DEFINED COND. (780-796)	2		1						1		1	2	2	2	2		1	1	4	6		
ALL OTHER DISEASES (RESIDUAL) (000-796)	5	2	8	6	5	7	16	10	17	12	30	13	23	17	24	14	12	22	31	26		
ACCIDENTAL DEATHS (800-949)	11	2	4	1	7	3	9	2	7	1	17	7	4	2	4	3	4	3	9	4		
MOTOR VEHICLE (810-823)	7	1	2		5	3	6		4		12	7	4	1	4	2		1	2	2		
OTHER TRANS. (800-807,825-845)																						
POISONING (850-877)											1											
FALLS (880-887)			1		1		2	1	2		1			1		1	4	1	4	1		
FIRES (890-899)																						
DROWNING & SUBMERSIONS (910)	3	1			1				1		1											
FIREARM MISSILES (922)																						
OTHER ACCIDENTS (800-949)	1		1	1			1	1		1	2							1	3	1		
SUICIDE (950-959)	4	1	3	1	6	5	5		4	3	1	1	2		2	2			2	2	1	
HOMICIDE & LEGAL INTERVENTION (960-978)	2	2	1		4		3					1	1	1	1		1					
ALL OTHER EXTERNAL CAUSES (980-999)			1	1	2			1	1			1	2	1	1	2			2			

TABLE 30A

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
HAWAII COUNTY 1978

CAUSES OF DEATH	TOTAL		ALL AGES		UNDER 1 YR.		1-4 YRS.		5-9 YRS.		10-14 YRS.		15-17 YRS.		18-19 YRS.		20-24 YRS.		25-29 YRS.		30-34 YRS.		35-39 YRS.	
	NUMBER	RATE*	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	521	644.1	331	190	5	9		2	2	1	1		2	1	2	1	8	1	9	2	9	1	5	2
TUBERCULOSIS, ALL FORMS (010-019)																								
SYPHILIS AND ITS SEQUELAE (090-097)																								
OTHER INFECTIVE & PARASITIC DISEASES (000-136)	8	9.9	7	1	2																			
MALIGNANT NEOPLASMS (140-209)	102	126.1	67	35															1					1
DIGEST. ORGANS (150-159)	35	43.3	24	11																				
RESPIRATORY SYSTEM (160-163)	27	33.4	20	7																				
BREAST (174)	4	4.9		4																				
GENITAL ORGANS (180-187)	8	9.9	5	3															1					
URINARY ORGANS (188-189)	4	4.9	2	2																				
LEUKEMIA (204-207)	3	3.7	3																					
OTHER (140-209)	21	26.0	13	8																				1
DIABETES MELLITUS (250)	17	21.0	9	8																				1
DISEASE OF CIRCULATORY SYSTEM (390-458)	241	297.9	147	94															1	1	1			
DISEASES OF HEART (390-398,402,404,410-429)	160	197.8	98	62																	1			
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)	2	2.5	1	1																				
HYPERTENSIVE HEART (402,404)	3	3.7	2	1																				
ISCHEMIC HEART (410-414)	130	160.7	83	47																	1			
OTHER HEART DISEASE (420-429)	25	30.9	12	13																				
HYPERTENSION (400,401,403)	1	1.2		1																				
CEREBROVASCULAR DISEASE (430-438)	61	75.4	37	24															1	1				
ARTERIOSCLEROSIS (440)	8	9.9	3	5																				
OTHER CIRCULATORY (441-458)	11	13.6	9	2																				
INFLUENZA/PNEUMONIA (470-474,480-486)	12	14.8	8	4						1														
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)	3	3.7	3																					
PEPTIC ULCER (531-533)	2	2.5	1	1																				
CIRRHOSIS OF LIVER (571)	7	8.6	3	4																				
NEPHRITIS AND NEPHROSIS (580-584)	2	2.5	1	1																				
COMPLICATIONS OF PREG., CHILDBIRTH & PUERPERIUM (630-678)																								
CONGENITAL ANOMALIES (740-759)	4	4.9		4		4																		
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)	5	6.2	3	2	3	2																		
SYMPTOMS & ILL-DEFINED COND. (780-796)	9	11.1	6	3		2																		
ALL OTHER DISEASES (RESIDUAL) (000-796)	44	54.4	25	19		1		2											1		2			
ACCIDENTAL DEATHS (800-949)	46	56.9	36	10					2		1		2	1	1		6		5	1	3	1	1	
MOTOR VEHICLE (810-823)	36	44.5	27	9					2		1		2	1	1		4		4	1	2	1	1	
OTHER TRANS. (800-807,825-845)																								
POISONING (850-877)																								
FALLS (880-887)	3	3.7	3																					
FIRES (890-899)																								
DROWNING & SUBMERSIONS (910)	4	4.9	4														1		1					
FIREARM MISSILES (922)																								
OTHER ACCIDENTS (800-949)	3	3.7	2	1													1				1			
SUICIDE (950-959)	8	9.9	7	1													2		1		1		2	
HOMICIDE & LEGAL INTERVENTION (960-978)	9	11.1	6	3											1	1		1			1		1	
ALL OTHER EXTERNAL CAUSES (980-999)	2	2.5	2																		1		1	

*RATE PER 100,000 TOTAL RESIDENT POPULATION

TABLE 30A (CONT'D)

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
HAWAII COUNTY 1978

	40-44 YRS.		45-49 YRS.		50-54 YRS.		55-59 YRS.		60-64 YRS.		65-69 YRS.		70-74 YRS.		75-79 YRS.		80-84 YRS.		OVER 84		UN-KNOWN	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	12	4	2	3	15	9	18	13	32	20	38	18	47	21	46	22	28	27	50	33		
TUBERCULOSIS, ALL FORMS (010-019)																						
SYPHILIS AND ITS SEQUELAE (090-097)																						
OTHER INFECTIVE & PARASITIC DISEASES (000-136)					1		1		1						2					1		
MALIGNANT NEOPLASMS (140-209)	2	1	1	2	7	4	5	2	8	10	12	1	13	4	12	5	3	3	3	2		
DIGEST. ORGANS (150-159)	1			1		1	2	1	4	2	7	1	6		3	3		1	1	1		
RESPIRATORY SYSTEM (160-163)	1		1		5	2	3	1	1	2	2		3	2	3		1					
BREAST (174)		1								2				1								
GENITAL ORGANS (180-187)				1						1	1				3	1						
URINARY ORGANS (188-189)						1			1						1	1						
LEUKEMIA (204-207)											1		1		1							
OTHER (140-209)					2				2	3	1		3	1	1		2	2	2	1		
DIABETES MELLITUS (250)							1	1	3	1		1		2	2	1	2	1	1			
DISEASE OF CIRCULATORY SYSTEM (390-458)	4		1	1	6	2	4	7	17	7	19	10	24	12	17	14	17	17	36	23		
DISEASES OF HEART (390-398,402,404,410-429)	3		1	1	5	1	2	5	11	5	13	4	16	10	9	8	12	13	25	15		
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)										1			1									
HYPERTENSIVE HEART (402,404)														1			1		1			
ISCHEMIC HEART (410-414)	3		1	1	5	1	2	4	10	3	11	4	14	6	8	6	9	10	19	12		
OTHER HEART DISEASE (420-429)								1	1	1	2		1	3	1	2	2	3	5	3		
HYPERTENSION (400,401,403)																		1				
CEREBROVASCULAR DISEASE (430-438)	1					1	2	2	4	2	3	5	7	2	8	4	4	3	7	4		
ARTERIOSCLEROSIS (440)																2	1		2	3		
OTHER CIRCULATORY (441-458)					1				2		3	1	1						2	1		
INFLUENZA/PNEUMONIA (470-474,480-486)												1	2		1		1	1	4	1		
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)													1		1				1			
PEPTIC ULCER (531-533)												1	1									
CIRRHOSIS OF LIVER (571)	1	1				2			1						1			1				
NEPHRITIS AND NEPHROSIS (580-584)										1									1			
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)																						
CONGENITAL ANOMALIES (740-759)																						
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)																						
SYMPTOMS & ILL-DEFINED COND. (780-796)															2		1		3	1		
ALL OTHER DISEASES (RESIDUAL) (000-796)							3	3	1	1	3	1	5	2	7	2	3	4		3		
ACCIDENTAL DEATHS (800-949)	3	1			1	1	2		1		4	3	1	1	1		1		1	1		
MOTOR VEHICLE (810-823)	2	1			1	1	1				4	3	1	1	1							
OTHER TRANS. (800-807,825-845)																						
POISONING (850-877)																						
FALLS (880-887)							1										1		1			
FIRES (890-899)																						
DROWNING & SUBMERSIONS (910)	1								1													
FIREARM MISSILES (922)																						
OTHER ACCIDENTS (800-949)																				1		
SUICIDE (950-959)							1													1		
HOMICIDE & LEGAL INTERVENTION (960-978)	2	1					1															
ALL OTHER EXTERNAL CAUSES (980-999)																						

TABLE 30B

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
HONOLULU COUNTY 1978

CAUSES OF DEATH	TOTAL		ALL AGES		UNDER 1 YR.		1-4 YRS.		5-9 YRS.		10-14 YRS.		15-17 YRS.		18-19 YRS.		20-24 YRS.		25-29 YRS.		30-34 YRS.		35-39 YRS.	
	NUMBER	RATE*	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	3325	462.1	1987	1338	96	57	15	9	4	8	7	3	20	4	23	3	65	14	45	18	48	12	42	15
TUBERCULOSIS, ALL FORMS (010-019)	3	.4	2	1									1								1			
SYPHILIS AND ITS SEQUELAE (090-097)																								
OTHER INFECTIVE & PARASITIC DISEASES (000-136)	34	4.7	19	15	3	4	1												1					
MALIGNANT NEOPLASMS (140-209)	774	107.6	445	329		1	2		2	2	1		2				1		5	3	2	1	9	7
DIGEST. ORGANS (150-159)	270	37.5	164	106													1		1		1		3	
RESPIRATORY SYSTEM (160-163)	185	25.7	131	54																			4	
BREAST (174)	63	8.7	1	62																		1		4
GENITAL ORGANS (180-187)	73	10.1	37	36																1				
URINARY ORGANS (188-189)	29	4.0	18	11																				
LEUKEMIA (204-207)	30	4.2	16	14		1	1		2	1									2				1	2
OTHER (140-209)	124	17.2	78	46			1			1	1		2						2	2	1		1	1
DIABETES MELLITUS (250)	83	11.5	35	48																1		1		
DISEASE OF CIRCULATORY SYSTEM (390-458)	1458	202.6	850	608	1	2		2		1	4	2					2	4	4		6	2	14	3
DISEASES OF HEART (390-398,402,404,410-429)	1072	149.0	641	431	1	1		2		1	2						2	1	1		4	1	12	1
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)	26	3.6	11	15							1											1		
HYPERTENSIVE HEART (402,404)	17	2.4	7	10																			2	
ISCHEMIC HEART (410-414)	934	129.8	569	365														1	1		4		9	1
OTHER HEART DISEASE (420-429)	95	13.2	54	41	1	1		2		1	1						2						1	
HYPERTENSION (400,401,403)	8	1.1	6	2																				
CEREBROVASCULAR DISEASE (430-438)	322	44.7	166	156		1					2	2						3	3		2	1	1	2
ARTERIOSCLEROSIS (440)	18	2.5	10	8																				
OTHER CIRCULATORY (441-458)	38	5.3	27	11																			1	
INFLUENZA/PNEUMONIA (470-474,480-486)	112	15.6	69	43	5	2	1	1					1		1		1				1		1	
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)	31	4.3	14	17														1						
PEPTIC ULCER (531-533)	9	1.2	5	4																				
CIRRHOSIS OF LIVER (571)	48	6.7	28	20																				
NEPHRITIS AND NEPHROSIS (580-584)	18	2.5	9	9									1											
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)																								
CONGENITAL ANOMALIES (740-759)	48	6.7	27	21	22	18	2	1					1				1							
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)	71	9.9	48	23	48	23																		
SYMPTOMS & ILL-DEFINED COND. (780-796)	36	5.0	22	14	9	3											1		1		3	1	1	
ALL OTHER DISEASES (RESIDUAL) (000-796)	259	36.0	145	114	6	4	1	2		1		1		1	2	2	2	2	3	2	5	2	4	2
ACCIDENTAL DEATHS (800-949)	183	25.4	151	32	2		7	2	2	3	1		10	2	10	1	40	3	16	4	8	2	6	1
MOTOR VEHICLE (810-823)	118	16.4	97	21			2	1	1	3	1		9	2	8	1	32	3	9	3	6	2	1	1
OTHER TRANS. (800-807,825-845)	3	.4	3														1		2					
POISONING (850-877)	2	.3	2												1						1			
FALLS (880-887)	24	3.3	18	6			1										3		1	1			1	
FIRES (890-899)																								
DROWNING & SUBMERSIONS (910)	12	1.7	12				3		1						1		1		2		1		1	
FIREARM MISSILES (922)	1	.1	1														1							
OTHER ACCIDENTS (800-949)	23	3.2	18	5	2		1	1					1				2		2				3	
SUICIDE (950-959)	82	11.4	65	17									1	1	10		9	1	5	1	12	2	4	
HOMICIDE & LEGAL INTERVENTION (960-978)	36	5.0	25	11						1			1				5	3	2	2	6	1	2	1
ALL OTHER EXTERNAL CAUSES (980-999)	40	5.5	28	12			1	1			1		2				3		8	5	4		1	1

*RATE PER 100,000 TOTAL RESIDENT POPULATION

TABLE 30B (CONT'D)

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
HONOLULU COUNTY 1978

	40-44 YRS.		45-49 YRS.		50-54 YRS.		55-59 YRS.		60-64 YRS.		65-69 YRS.		70-74 YRS.		75-79 YRS.		80-84 YRS.		OVER 84		UN-KNOWN	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	52	23	65	37	115	77	154	88	215	101	229	107	204	152	211	173	159	186	218	251	1	
TUBERCULOSIS, ALL FORMS (010-019)																		1				
SYPHILIS AND ITS SEQUELAE (090-097)																						
OTHER INFECTIVE & PARASITIC DISEASES (000-136)	1	1	1			1			2		2		2	2	2	2	1	1	3	4		
MALIGNANT NEOPLASMS (140-209)	13	12	14	12	33	38	44	40	76	36	67	30	55	50	61	42	32	31	26	24		
DIGEST. ORGANS (150-159)	3	2	8	1	13	10	15	8	28	11	23	10	24	20	26	20	8	14	10	10		
RESPIRATORY SYSTEM (160-163)	6	3	2	4	10	8	19	8	25	9	23	6	17	5	13	2	6	6	6	3		
BREAST (174)		3		3		12		13		4	1	5		9		3		2		3		
GENITAL ORGANS (180-187)		3		1		1	1	7	4	6	6	2	4	8	8	3	7	3	7	1		
URINARY ORGANS (188-189)			1		2				3		2	2	1	1	4	5	5			3		
LEUKEMIA (204-207)	1			2	1	2		1	4		1	1	2	2	1	2						
OTHER (140-209)	3	1	3	1	7	5	9	3	12	6	11	4	7	5	9	7	6	6	3	4		
DIABETES MELLITUS (250)	1				3	1	3	1	9	4	7	2	4	11	2	9	2	12	4	6		
DISEASE OF CIRCULATORY SYSTEM (390-458)	18	3	31	15	46	21	93	32	86	40	106	50	111	69	116	88	99	105	123	169		
DISEASES OF HEART (390-398,402,404,410-429)	12	2	27	9	43	16	70	24	73	30	80	29	75	44	83	72	64	72	92	116		
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)					1	2	1	1	1	2	2	1	2	2	2	3		3	1			
HYPERTENSIVE HEART (402,404)						1	1		1	2	1	2		1	1			3	1	1		
ISCHEMIC HEART (410-414)	12	1	23	5	36	12	64	20	66	25	75	30	69	40	74	61	59	65	77	104		
OTHER HEART DISEASE (420-429)		1	4	4	6	1	4	3	5	1	2	6	4	1	6	8	5	1	13	11		
HYPERTENSION (400,401,403)			1		1		1		1			1	1		1					1		
CEREBROVASCULAR DISEASE (430-438)	5		2	6	2	4	9	6	9	10	22	9	29	21	27	15	29	30	24	46		
ARTERIOSCLEROSIS (440)									1		1		1	2	2	1	2	1	3	4		
OTHER CIRCULATORY (441-458)	1	1	1			1	3	2	2		3	1	5	2	3		4	2	4	2		
INFLUENZA/PNEUMONIA (470-474,480-486)					4	1	2		5	1	8	2	4	2	8	6	7	10	20	18		
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)		1		1	2	2	1		1	1	3		2	1		6	3	2	2	2		
PEPTIC ULCER (531-533)								1			1	1		1	1	1			3			
CIRRHOSIS OF LIVER (571)	2	1	4	2	4	2	2	4	8	4	4	2	1			2	3	3				
NEPHRITIS AND NEPHROSIS (580-584)					1	1			3	1		1			2	2	1	3	1	1		
COMPLICATIONS OF PREG., CHILDBIRTH & PUERPERIUM (630-678)																						
CONGENITAL ANOMALIES (740-759)		1									1	1										
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)																						
SYMPTOMS & ILL-DEFINED COND. (780-796)	2								1		1	2	2	2				1	1	5		
ALL OTHER DISEASES (RESIDUAL) (000-796)	5	2	8	5	5	5	11	7	13	10	19	11	16	11	14	10	7	15	24	19		
ACCIDENTAL DEATHS (800-949)	6		3	1	6	1	5	2	6	1	9	2	2	1	1	1	3	2	8	3		
MOTOR VEHICLE (810-823)	4		2		4	1	3		4		6	2	2		1				2	2		
OTHER TRANS. (800-807,825-845)																						
POISONING (850-877)																						
FALLS (880-887)			1		1		1	1	2		1			1		1	3	1	3	1		
FIRES (890-899)																						
DROWNING & SUBMERSIONS (910)	1				1																	
FIREARM MISSILES (922)																						
OTHER ACCIDENTS (800-949)	1			1			1	1		1	2							1	3			
SUICIDE (950-959)	4	1	3	1	5	4	2		4	3		1	2		2	2			1		1	
HOMICIDE & LEGAL INTERVENTION (960-978)		1	1		4		1					1	1	1	1		1					
ALL OTHER EXTERNAL CAUSES (980-999)					2			1	1			1	2	1	1	2			2			

TABLE 30C

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
MAUI COUNTY 1978

CAUSES OF DEATH	TOTAL		ALL AGES		UNDER 1 YR.		1-4 YRS.		5-9 YRS.		10-14 YRS.		15-17 YRS.		18-19 YRS.		20-24 YRS.		25-29 YRS.		30-34 YRS.		35-39 YRS.	
	NUMBER	RATE*	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	427	695.2	263	164	4	5	2		1		1	1	2	1	5		6	3	12	1	5	3	7	3
TUBERCULOSIS, ALL FORMS (010-019)	1	1.6		1																				
SYPHILIS AND ITS SEQUELAE (090-097)																								
OTHER INFECTIVE & PARASITIC DISEASES (000-136)	2	3.3	2		1																			
MALIGNANT NEOPLASMS (140-209)	96	156.3	52	44			1						1				1		1				1	1
DIGEST. ORGANS (150-159)	33	53.7	21	12																			1	
RESPIRATORY SYSTEM (160-163)	19	30.9	14	5																				
BREAST (174)	10	16.3		10																				
GENITAL ORGANS (180-187)	10	16.3	4	6																				
URINARY ORGANS (188-189)	4	6.5	3	1																				
LEUKEMIA (204-207)	3	4.9	2	1			1										1							
OTHER (140-209)	17	27.7	8	9									1						1					1
DIABETES MELLITUS (250)	14	22.8	11	3																				
DISEASE OF CIRCULATORY SYSTEM (390-459)	188	306.1	111	77															1				1	1
DISEASES OF HEART (390-398,402,404,410-429)	123	200.2	79	44																			1	1
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)	3	4.9	1	2																				
HYPERTENSIVE HEART (402,404)	4	6.5	4																					
ISCHEMIC HEART (410-414)	112	182.3	73	39																				1
OTHER HEART DISEASE (420-429)	4	6.5	1	3																			1	
HYPERTENSION (400,401,403)	4	6.5	2	2																				
CEREBROVASCULAR DISEASE (430-438)	47	76.5	22	25																				
ARTERIOSCLEROSIS (440)	6	9.8	3	3																				
OTHER CIRCULATORY (441-458)	8	13.0	5	3															1					
INFLUENZA/PNEUMONIA (470-474,480-486)	10	16.3	6	4								1												
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)	9	14.6	7	2															1					
PEPTIC ULCER (531-533)	1	1.6	1								1													
CIRRHOSIS OF LIVER (571)	8	13.0	6	2																			1	
NEPHRITIS AND NEPHROSIS (580-584)	2	3.3	1	1																				
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)	1	1.6		1														1						
CONGENITAL ANOMALIES (740-759)	1	1.6	1		1																			
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)	7	11.4	2	5	2	5																		
SYMPTOMS & ILL-DEFINED COND. (780-796)																								
ALL OTHER DISEASES (RESIDUAL) (000-796)	34	55.3	19	15																		2		
ACCIDENTAL DEATHS (800-949)	34	55.3	28	6			1							1	3		4		5	1	3	1	4	1
MOTOR VEHICLE (810-823)	24	39.1	19	5											3		3		4	1	2	1	2	1
OTHER TRANS. (800-807,825-845)																								
POISONING (850-877)	1	1.6	1														1							
FALLS (880-887)	1	1.6	1																		1			
FIRES (890-899)																								
DROWNING & SUBMERSIONS (910)	6	9.8	5	1			1							1									2	
FIREARM MISSILES (922)																								
OTHER ACCIDENTS (800-949)	2	3.3	2																1					
SUICIDE (950-959)	11	17.9	9	2									1		2			1	2		1			
HOMICIDE & LEGAL INTERVENTION (960-978)	6	9.8	5	1					1								1	1	1		1			
ALL OTHER EXTERNAL CAUSES (980-999)	2	3.3	2																1					

*RATE PER 100,000 TOTAL RESIDENT POPULATION

TABLE 30C (CONT'D)

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
MAUI COUNTY 1978

	40-44 YRS.		45-49 YRS.		50-54 YRS.		55-59 YRS.		60-64 YRS.		65-69 YRS.		70-74 YRS.		75-79 YRS.		80-84 YRS.		OVER 84		UN-KNOWN	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	4	1	5	7	8	8	22	17	23	14	37	12	37	22	31	13	22	25	29	28		
TUBERCULOSIS, ALL FORMS (010-019)																		1				
SYPHILIS AND ITS SEQUELAE (090-097)																						
OTHER INFECTIVE & PARASITIC DISEASES (000-136)											1											
MALIGNANT NEOPLASMS (140-209)	1	1	2	3	5	4	5	10	4	6	11	6	7	3	3	2	4	5	5	3		
DIGEST. ORGANS (150-159)	1		1		3		1	3	1	1	4	1	2	1	1	1	3	2	3	3		
RESPIRATORY SYSTEM (160-163)			1				3		3	2	3	1	1	1	2			1	1			
BREAST (174)		1		2		1		2		1		2						1				
GENITAL ORGANS (180-187)						1	1	2		1		1	3	1								
URINARY ORGANS (188-199)					1												1	1	1			
LEUKEMIA (204-207)								1														
OTHER (140-209)				1	1	2		2		1	4	1	1			1						
DIABETES MELLITUS (250)							2						1	2	3		4	1	1			
DISEASE OF CIRCULATORY SYSTEM (390-458)	1			3	2	2	6	6	15	6	18	4	24	11	20	9	9	15	14	20		
DISEASES OF HEART (390-398,402,404,410-429)	1			1	1	1	4	2	10	4	15	3	19	6	11	6	7	10	10	10		
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)										1					1			1				
HYPERTENSIVE HEART (402,404)							1				2		1									
ISCHEMIC HEART (410-414)	1				1	1	3	2	10	3	13	2	18	5	10	6	7	9	10	10		
OTHER HEART DISEASE (420-429)				1								1		1								
HYPERTENSION (400,401,403)								1					1	1	1							
CEREBROVASCULAR DISEASE (430-438)				2	1		2	3	3	1	2	1	4	4	7	2	1	4	2	8		
ARTERIOSCLEROSIS (440)																	1	1	2	2		
OTHER CIRCULATORY (441-458)						1			2	1	1				1	1						
INFLUENZA/PNEUMONIA (470-474,480-486)									1		1			2	1	1	1		2			
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)									2			1					2		2	1		
PEPTIC ULCER (531-533)																						
CIRRHOSIS OF LIVER (571)			1				2	1		1			1		1							
NEPHRITIS AND NEPHROSIS (580-584)													1	1								
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)																						
CONGENITAL ANOMALIES (740-759)																						
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)																						
SYMPTOMS & ILL-DEFINED COND. (780-796)																						
ALL OTHER DISEASES (RESIDUAL) (000-796)				1		1	2		1	1	5	1	2	3	2		2	3	5	3		
ACCIDENTAL DEATHS (800-949)	2		1			1	2				1		1		1	1						
MOTOR VEHICLE (810-823)	1					1	2						1		1	1						
OTHER TRANS. (800-807,825-845)																						
POISONING (850-877)																						
FALLS (880-887)																						
FIRES (890-899)																						
DROWNING & SUBMERSIONS (910)	1										1											
FIREARM MISSILES (922)																						
OTHER ACCIDENTS (900-949)			1																			
SUICIDE (950-959)					1		2													1		
HOMICIDE & LEGAL INTERVENTION (960-978)							1															
ALL OTHER EXTERNAL CAUSES (980-999)			1																			

TABLE 30D

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
KAUAI COUNTY 1978

CAUSES OF DEATH	TOTAL		ALL AGES		UNDER 1 YR.		1-4 YRS.		5-9 YRS.		10-14 YRS.		15-17 YRS.		18-19 YRS.		20-24 YRS.		25-29 YRS.		30-34 YRS.		35-39 YRS.	
	NUMBER	RATE*	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	235	677.4	137	98	5	4		1		1				1	1	1	5	3	2	2	1		2	
TUBERCULOSIS, ALL FORMS (010-019)	3	8.6	3																					
SYPHILIS AND ITS SEQUELAE (090-097)	1	2.9		1																				
OTHER INFECTIVE & PARASITIC DISEASES (000-136)	2	5.8	2																					
MALIGNANT NEOPLASMS (140-209)	43	123.9	24	19																				
DIGEST. ORGANS (150-159)	18	51.9	13	5																				
RESPIRATORY SYSTEM (160-163)	9	25.9	6	3																				
BREAST (174)	2	5.8		2																				
GENITAL ORGANS (180-187)	3	8.6		3																				
URINARY ORGANS (188-189)	1	2.9	1																					
LEUKEMIA (204-207)	3	8.6	2	1																				
OTHER (140-209)	7	20.2	2	5																				
DIABETES MELLITUS (250)	5	14.4	1	4																				
DISEASE OF CIRCULATORY SYSTEM (390-458)	108	311.3	62	46											1									
DISEASES OF HEART (390-398,402,404,410-429)	86	247.9	48	38											1									
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)																								
HYPERTENSIVE HEART (402,404)																								
ISCHEMIC HEART (410-414)	84	242.1	46	38																				
OTHER HEART DISEASE (420-429)	2	5.7	2												1									
HYPERTENSION (400,401,403)	1	2.9		1																				
CEREBROVASCULAR DISEASE (430-438)	15	43.2	8	7																				
ARTERIOSCLEROSIS (440)	3	8.6	3																					
OTHER CIRCULATORY (441-458)	3	8.6	3																					
INFLUENZA/PNEUMONIA (470-474,480-486)	11	31.7	11																					
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)	5	14.4	2	3												1				1				
PEPTIC ULCER (531-533)	3	8.6	2	1																				
CIRRHOSIS OF LIVER (571)	2	5.8		2																1				
NEPHRITIS AND NEPHROSIS (580-584)																								
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)																								
CONGENITAL ANOMALIES (740-759)	3	8.6		3		2				1														
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)	4	11.5	2	2	2	2																		
SYMPTOMS & ILL-DEFINED COND. (780-796)	4	11.5	4		3																			
ALL OTHER DISEASES (RESIDUAL) (000-796)	14	40.3	9	5																			1	
ACCIDENTAL DEATHS (800-949)	17	49.0	8	9				1						1			2	2	2					
MOTOR VEHICLE (810-823)	12	34.6	4	8				1						1				2	1					
OTHER TRANS. (800-807,825-845)																								
POISONING (850-877)	1	2.9	1																					
FALLS (880-887)	2	5.8	2														1		1					
FIRES (890-899)	2	5.8																						
DROWNING & SUBMERSIONS (910)			1	1													1							
FIREARM MISSILES (922)																								
OTHER ACCIDENTS (800-949)																								
SUICIDE (950-959)	5	14.4	4	1													1						1	
HOMICIDE & LEGAL INTERVENTION (960-978)	4	11.5	3	1													2	1			1			
ALL OTHER EXTERNAL CAUSES (980-999)	1	2.9		1																				

*RATE PER 100,000 TOTAL RESIDENT POPULATION

TABLE 30D (CONT'D)

RESIDENT DEATHS BY AGE GROUP, BY SEX AND BY SELECTED CAUSES OF DEATH
KAUAI COUNTY 1978

	40-44 YRS.		45-49 YRS.		50-54 YRS.		55-59 YRS.		60-64 YRS.		65-69 YRS.		70-74 YRS.		75-79 YRS.		80-84 YRS.		OVER 84		UN-KNOWN	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
TOTAL DEATHS	1	3	6	4	4	5	6	4	13	7	21	8	13	10	15	12	19	18	23	14		
TUBERCULOSIS, ALL FORMS (010-019)			1										1				1					
SYPHILIS AND ITS SEQUELAE (090-097)																		1				
OTHER INFECTIVE & PARASITIC DISEASES (000-136)											1						1					
MALIGNANT NEOPLASMS (140-209)		1		1	2	2	2	1	4	4	2		4	1	2	3	6	4	2	2		
DIGEST. ORGANS (150-159)		1				1	2		3	1	1		2		2		2	1	1	1		
RESPIRATORY SYSTEM (160-163)					1						1		1			3	2		1			
BREAST (174)				1						1												
GENITAL ORGANS (180-187)								1		1				1								
URINARY ORGANS (188-189)																	1					
LEUKEMIA (204-207)					1				1									1				
OTHER (140-209)						1				1			1				1	2		1		
DIABETES MELLITUS (250)											1	1				1		1		1		
DISEASE OF CIRCULATORY SYSTEM (390-458)			4	2	2	1	3	3	6	3	5	4	6	8	10	5	10	10	15	10		
DISEASES OF HEART (390-398,402,404,410-429)			2	2	2	1	2	3	4	3	4	3	2	6	10	4	9	9	12	8		
RHEUMATIC FEVER AND CHRONIC RHEUMATIC HEART DISEASE (390-398)																						
HYPERTENSIVE HEART (402,404)																						
ISCHEMIC HEART (410-414)			2	2	2	1	2	3	4	3	4	3	2	6	10	4	8	8	12	8		
OTHER HEART DISEASE (420-429)																	1					
HYPERTENSION (400,401,403)																				1		
CEREBROVASCULAR DISEASE (430-438)			1				1					1	3	2		1	1	2	2	1		
ARTERIOSCLEROSIS (440)			1						1		1											
OTHER CIRCULATORY (441-458)									1				1						1			
INFLUENZA/PNEUMONIA (470-474,480-486)	1								1		3		1		1		1		3			
BRONCHITIS/EMPHYSEMA/ASTHMA (490-493)											1		1					1				
PEPTIC ULCER (531-533)							1				1	1										
CIRRHOSIS OF LIVER (571)		1																				
NEPHRITIS AND NEPHROSIS (580-584)																						
COMPLICATIONS OF PREG, CHILDBIRTH & PUERPERIUM (630-678)																						
CONGENITAL ANOMALIES (740-759)																						
CERTAIN CAUSES OF MORTALITY IN INFANCY (760-772,774-778)																						
SYMPTOMS & ILL-DEFINED COND. (780-796)			1																			
ALL OTHER DISEASES (RESIDUAL) (000-796)						1			2		3			1	1	2			2	1		
ACCIDENTAL DEATHS (800-949)		1									3	2			1	1		1				
MOTOR VEHICLE (810-823)											2	2			1	1		1				
OTHER TRANS. (800-807,825-845)																						
POISONING (850-877)											1											
FALLS (880-887)																						
FIRES (890-899)																						
DROWNING & SUBMERSIONS (910)		1																				
FIREARM MISSILES (922)																						
OTHER ACCIDENTS (800-949)																						
SUICIDE (950-959)						1					1								1			
HOMICIDE & LEGAL INTERVENTION (960-978)																						
ALL OTHER EXTERNAL CAUSES (980-999)				1																		

TABLE 31

TOTAL RECORDED DEATHS FROM MALIGNANT NEOPLASM BY MAJOR AND SELECTED SITES, SEX, AND AGE
STATE OF HAWAII 1978

CAUSES OF DEATH	ALL AGES		UNDER 1 YR.		1-4 YRS.		5-9 YRS.		10-14 YRS.		15-17 YRS.		18-19 YRS.		20-24 YRS.		25-29 YRS.		30-34 YRS.		35-39 YRS.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
BUCCAL CAVITY AND PHARYNX 140-149	20	9																				
LIP 140																						
TONGUE 141	8	1																				
SALIVARY GLAND 142	2	1																				
GUM 143																						
FLOOR OF MOUTH 144	2	1																				
OTHER & UNSPEC PARTS OF MOUTH 145	3	1																				
OROPHARYNX 146		4																				
NASOPHARYNX 147	2																					
HYPOPHARYNX 148	1	1																				
PHARYNX UNSPECIFIED 149	2																					
DIGESTIVE ORGANS & PERITONEUM 150-159	224	140													1		1		1		4	
ESOPHAGUS 150	17	4																			2	
STOMACH 151	67	39																				
SMALL INTESTINE & DUODENUM 152	1	1																				
LARGE INTESTINE 153	57	41																	1		1	
RECTUM & RECTOSIGMOID JUNCTION 154	19	9																				
LIVER & INTRAHEPAT BILE DUCTS PRI 155	19	9													1		1					
GALL BLADDER & BILE DUCTS 156	7	9																				
PANCREAS 157	35	27																			1	
PERITONEUM & RETROPERITONEAL TISS 158	1	1																				
UNSPEC DIGESTIVE ORGANS 159	1																					
RESPIRATORY SYSTEM 160-163	176	72								1											4	
NOSE,NASAL CAV, MIDDLE EAR & ACCES 160		1																				
LARYNX 161	7																					
TRACHEA, BRONCHUS & LUNG 162	169	70																			4	
OTHER & UNSPEC ORGANS 163		1								1												
BONE, CONN TISSUE, SKIN, BREAST 170-174	15	93									1							2		1	1	6
BONE 170	1	1									1											
CONNECTIVE & OTHER SOFT TISSUE 171	3	3																1				1
MELANOMA OF SKIN 172	9	6																1			1	1
NEOPLASM OF SKIN 173	1	3																				
BREAST 174	1	80																		1		4
GENITOURINARY ORGANS 180-189	71	63															1	1				
CERVIC UTERI 180		10																1				
CHORIONEPITHELIOMA 181																						
OTHER MALIG NEOPLASM OF UTERUS 182		10																				
OVARY, FALLOP TUBE & BROAD LIGAM 183		26																				
OTHER & UNSPEC FEMALE GENITAL ORG 184		3																				
PROSTATE 185	45																					
TESTIS 186	1																1					
OTHER & UNSPEC MALE GENITAL ORGAN 187																						
BLADDER 188	8	10																				
OTHER & UNSPEC URINARY ORGANS 189	17	4																				
OTHER AND UNSPECIFIED SITES 190-199	48	32			1			1	1		2											
EYE 190																						
BRAIN 191	11	3			1						2											
OTHER PARTS OF NERVOUS SYSTEM 192	7	1						1	1													
THYROID GLAND 193	1	2																				
OTHER ENDOCRINE GLANDS 194	2																					
ILL-DEFINED SITES 195																						
SECONDARY & UNSPECIFIED MALIGNANT NEOPLASM OF LYMPH NODES 196	5	3																				
SECONDARY MALIGNANT NEOPLASM OF RESPIRATORY & DIGESTIVE SYSTEMS 197	4	3																				
OTHER SECONDARY MALIG NEOPLASM 198																						
WITHOUT SPECIFICATION OF SITE 199	18	20																				
LYMPHATIC & HEMATOPOIETIC TISS 200-209	47	36		1	2		2	1							1		5		1	1	1	3
LYMPHOSARCOMA & RETIC-CELL SARCO 200	2	4															1					
HODGKINS DISEASE 201	2																					
OTHER NEOPLASMS OF LYMPHOID TISS 202	14	8															2		1			1
MULTIPLE MYELOMA 203	3	4																				
LYMPHATIC LEUKEMIA 204	7	4			2		2	1													1	
MYELOID LEUKEMIA 205	12	14		1											1		2			1		2
MONOCYTIC LEUKEMIA 206																						
OTHER AND UNSPECIFIED LEUKEMIA 207	4	1																				
POLYCYTHEMIA VERA 208	2																					
MYELOFIBROSIS 209	1	1																				
TOTAL MALIGNANT NEOPLASMS 140-209	601	445		1	3		2	2	1	1	3				2		7	3	2	2	10	9

TABLE 31 (CONT'D)

TOTAL RECORDED DEATHS FROM MALIGNANT NEOPLASM BY MAJOR AND SELECTED SITES, SEX, AND AGE
STATE OF HAWAII 1978

		40-44 YRS.		45-49 YRS.		50-54 YRS.		55-59 YRS.		60-64 YRS.		65-69 YRS.		70-74 YRS.		75-79 YRS.		80-84 YRS.		OVER 84		UN-KNOWN	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
BUCCAL CAVITY AND PHARYNX	140-149			1	1	2	1	2	2	3	1	5		4	2	3	1		1				
LIP	140																						
TONGUE	141					2		1	1	2		2				1							
SALIVARY GLAND	142													1	1	1							
GUM	143																						
FLOOR OF MOUTH	144										1	1				1							
OTHER & UNSPEC PARTS OF MOUTH	145									1		1		1	1								
OROPHARYNX	146				1		1		1								1						
NASOPHARYNX	147			1				1															
HYPOPHARYNX	148											1							1				
PHARYNX UNSPECIFIED	149													2									
DIGESTIVE ORGANS & PERITONEUM	150-159	5	3	9	2	18	12	20	12	36	16	35	13	34	22	32	25	13	18	15	17		
ESOPHAGUS	150				1	2		2		4		4	2	4		1					1		
STOMACH	151	1	2	2		3	2	6	2	8	5	9	7	8	4	16	6	5	6	7	5		
SMALL INTESTINE & DUODENUM	152					1															1		
LARGE INTESTINE	153	2	1	3	1	6	6	6	4	10	3	8	1	8	7	4	8	3	5	5	5		
RECTUM & RECTOSIGMOID JUNCTION	154							1	2	4	1	5	2	3	1	3	1	3	1		1		
LIVER & INTRAHEPAT BILE DUCTS PRI	155	1		2		3	2	2		4				2	1	1	4		1	2	1		
GALL BLADDER & BILE DUCTS	156			1				1	1	1	2	2			2	2	2		1		1		
PANCREAS	157	1		1		3	1	2	3	4	5	6	1	9	7	5	4	2	4	1	2		
PERITONEUM & RETROPERITONEAL TISS	158						1			1													
UNSPEC DIGESTIVE ORGANS	159											1											
RESPIRATORY SYSTEM	160-163	7	3	5	4	17	10	26	10	30	14	30	7	22	8	18	5	9	7	8	3		
NOSE,NASAL CAV, MIDDLE EAR & ACCES	160																		1				
LARYNX	161									2				1		3				1			
TRACHEA, BRONCHUS & LUNG	162	7	3	5	4	17	10	26	10	28	14	30	7	21	8	15	5	9	6	7	3		
OTHER & UNSPEC ORGANS	163																						
BONE, CONN TISSUE, SKIN, BREAST	170-174	1	5		6	2	13	2	16	1	9	3	10	2	11	1	4		5	1	5		
BONE	170														1								
CONNECTIVE & OTHER SOFT TISSUE	171	1						1				1	1										
MELANOMA OF SKIN	172					2		1	1	1	1	1	1	2		1			1				
NEOPLASM OF SKIN	173																		1	1	2		
BREAST	174		5		6		13		15		8	1	8		10		4		3		3		
GENITOURINARY ORGANS	180-189		3	1	2	3	3	3	10	8	9	9	6	8	11	16	10	14	4	8	4		
CERVIC UTERI	180		2				1		1		1		1		2		1						
CHORIONEPITHELIOMA	181																						
OTHER MALIG NEOPLASM OF UTERUS	182								1		3		1		2		2		1				
OVARY, FALLOP TUBE & BROAD LIGAM	183		1		2		1		8		5		2		5				1		1		
OTHER & UNSPEC FEMALE GENITAL ORG	184														1		1		1				
PROSTATE	185							2		4		7		7		11		7		7			
TESTIS	186																						
OTHER & UNSPEC MALE GENITAL ORGAN	187																						
BLADDER	188					1						1	1		1	3	6	2		1	2		
OTHER & UNSPEC URINARY ORGANS	189			1		2	1	1		4		1	1	1		2		5	1		1		
OTHER AND UNSPECIFIED SITES	190-199	2	1	3	1	4	5	3	2	6	6	7	1	4	3	5	4	7	5	3	3		
EYE	190																						
BRAIN	191	1	1	1		1		1			1	2				1		1	1				
OTHER PARTS OF NERVOUS SYSTEM	192			1		2				1		1		1									
THYROID GLAND	193										1		1			1							
OTHER ENDOCRINE GLANDS	194											2											
ILL-DEFINED SITES	195																						
SECONDARY & UNSPECIFIED MALIGNANT NEOPLASM OF LYMPH NODES	196							1						1	2			2		1	1		
SECONDARY MALIGNANT NEOPLASM OF RESPIRATORY & DIGESTIVE SYSTEMS	197	1					1			3					1						1		
OTHER SECONDARY MALIG NEOPLASM	198																						
WITHOUT SPECIFICATION OF SITE	199			1	1	1	4	1	2	2	4	2		2		3	4	4	4	2	1		
LYMPHATIC & HEMATOPOIETIC TISS	200-209	1			2	4	4	2	4	10	3	6	3	6	4	3	5	2	4	1	1		
LYMPHOSARCOMA & RETIC-CELL SARCO	200										2		1	1	1								
HODGKINS DISEASE	201					1						1											
OTHER NEOPLASMS OF LYMPHOID TISS	202					1	1	1	1	4		1	1	2	1	1	2	1			1		
MULTIPLE MYELOMA	203						1			1		1					1	1	2				
LYMPHATIC LEUKEMIA	204				1				1			1	1			1							
MYELOID LEUKEMIA	205	1			1	2	2		2	3		1		1	1	1	2		2				
MONOCYTIC LEUKEMIA	206																						
OTHER AND UNSPECIFIED LEUKEMIA	207									2				2	1								
POLYCYTHEMIA VERA	208							1				1											
MYELOFIBROSIS	209										1									1			
TOTAL MALIGNANT NEOPLASMS	140-209	16	15	19	18	50	48	58	56	94	58	95	40	80	61	78	54	45	44	36	33		

TABLE 32

TOTAL RECORDED DEATHS BY ISLAND OF OCCURRENCE, BY METHOD OF DISPOSITION AND AUTOPSY PERFORMED
HAWAII COUNTY 1978

ISLAND OF OCCURRENCE	METHOD OF DISPOSITION								AUTOPSY PERFORMED						PRESUMPTIVE DEATHS
									PRIV. PHY.		MED.EX./COR.PHY.		OTHER		
	TOTAL	BURIAL	CREMATION	REMOVAL	ENTOMBMENT	EDUC. PURPOSE	OTHER	UNK.	TOTAL	YES	TOTAL	YES	TOTAL	YES	
TOTAL	4860	2255	1995	574	21		6	9	3814	597	1030	748	3		13
HAWAII	504	247	206	48				3	378	75	124	110			2
OAHU	3679	1675	1537	438	21		4	4	2976	475	695	449	1		7
KALAWAO COUNTY															
KAUAI	237	124	87	24				2	172	29	63	57			2
NIIHAU															
LANAI	6	5		1					4		2	2			
MAUI	401	185	164	51			1		268	18	130	117	2		1
MOLOKAI (EXCL OF KALAWAO)	25	19		5			1		16		8	5			1
UNKNOWN	9		1	7							8	8			

FIGURE 3

INFANT DEATHS IN HAWAII 1900-1978

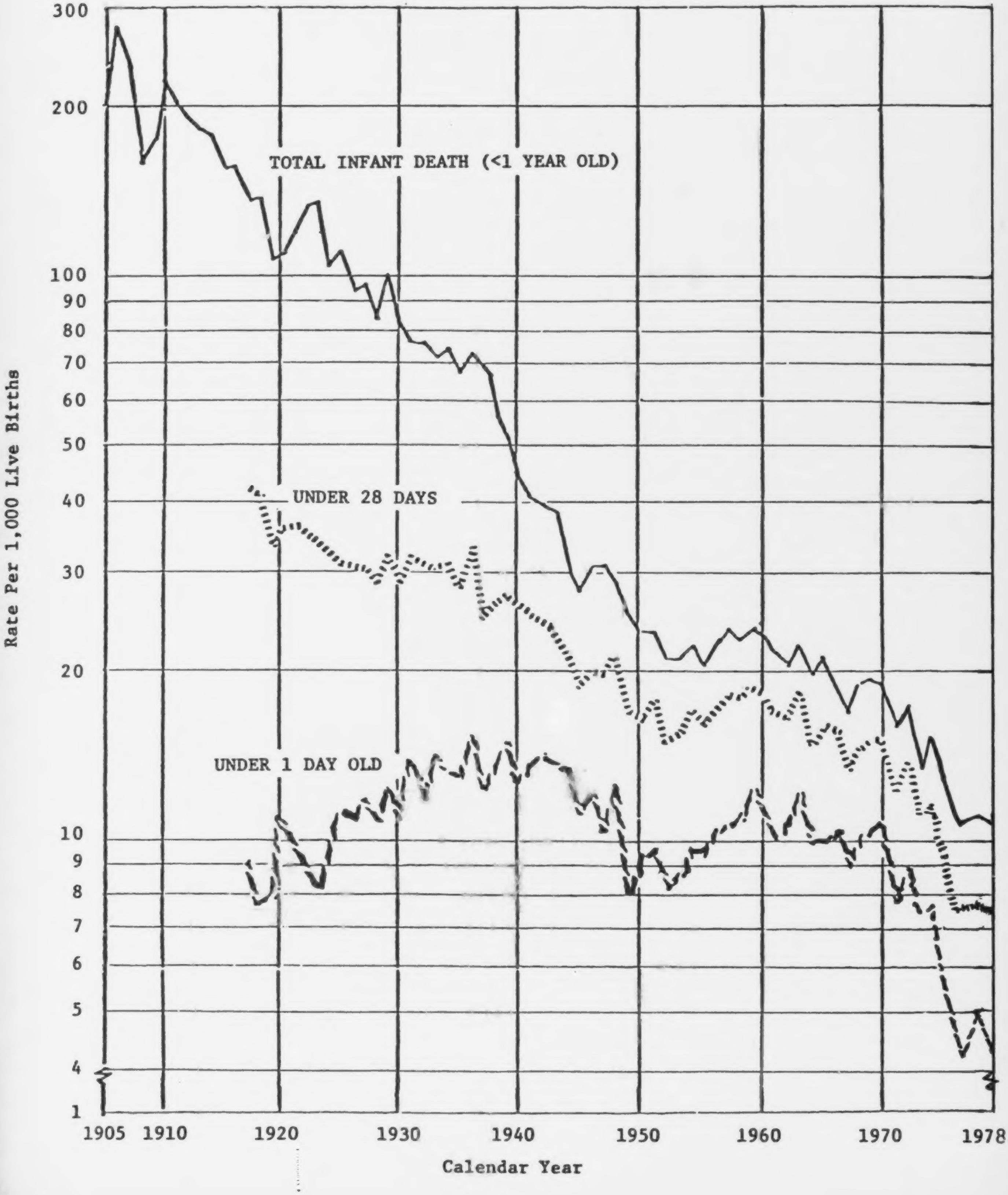


TABLE 33

INFANT DEATHS BY PLACE OF OCCURRENCE REALLOCATED TO USUAL RESIDENCE BY RACE OF CHILD STATE OF HAWAII, 1978

		TOTAL BY PLACE OF OCCURRENCE		TOTAL BY PLACE OF RESIDENCE		RACE OF CHILD													
		NO.	RATE*	NO.	RATE*	CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTUGUESE	VIETNAMESE	OTHER RACES	UNKN
TOTAL RECORDED		201	12.0	201	12.0	38	1	69	3	35	26	7	4	4	6	2		4	2
STATE OF HAWAII	NUMBER	201	12.0	186	11.1	35	1	69	1	33	26	7	3	4	4	2		1	
	RATE*	12.0	...	11.1	...	9.0	18.9	13.8	1.8	11.8	11.1	32.6	12.4	8.2	8.7	10.2	--	2.5	--
COUNTY OF HAWAII		10	5.9	14	8.2	1	1	5		2	4	1							
CITY OF HILO		8	7.3	5	7.9		1	1		1	1	1							
BALANCE OF COUNTY		2	3.3	9	11.8	1		4		1	3								
COUNTY OF HONOLULU		181	13.8	154	11.8	31		58	1	25	20	5	3	4	4	2		1	
CITY OF HONOLULU		165	13.9	71	13.6	13		24	1	15	14			1	1	2			
BALANCE OF COUNTY		16	12.9	83	10.7	18		34		10	6	5	3	3	3			1	
COUNTY OF KALAWAO		—	--																
COUNTY OF KAUAI		6	8.0	9	11.9	2		3		4									
ISLAND OF KAUAI		6	8.0	9	11.9	2		3		4									
ISLAND OF NIIHAU																			
COUNTY OF MAUI		4	3.4	9	7.3	1		3		2	2	1							
ISLAND OF LANAI		—	--																
ISLAND OF MAUI		4	3.7	6	5.4	1		1		2	1	1							
ISLAND OF MOLOKAI (EXCL. KALAWAO)		—	--	3	25.9			2			1								
NON-RESIDENT		—	--	13	--	3			2	2			1		2			3	
UNKNOWN		—	--	2	--														2

* NUMBER OF INFANT DEATHS PER 1,000 LIVE BIRTHS

TABLE 34

RESIDENT INFANT DEATHS BY AGE AND RACE OF MOTHER STATE OF HAWAII, 1978

AGE OF MOTHER		ALL RACES		RACE OF MOTHER												
		NO.	RATE*	CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTUGUESE	VIETNAMESE	OTHER RACES
ALL AGES	NUMBER	186	11.1	49	2	54	3	33	24	3	4	2	3	1	--	8
	RATE*	11.1	...	9.5	14.6	15.5	4.9	11.0	10.1	11.2	13.8	4.3	9.2	6.3	--	21.3
UNDER 15		—	--													
15 - 17		9	15.4	2		4		3								
18 - 19		17	11.4	1		11		5								
20 - 24		54	9.8	16	1	18		9	6	1			1			2
25 - 29		62	11.6	21	1	15		11	10	2	2					
30 - 34		22	7.7	6		3	2	3	4		1	2	1			
35 - 39		12	15.2	3		1		2	3		1		1	1		
40 - 44		4	32.0			2	1		1							
45 & OVER		—	--													
UNKNOWN		6	--													6

* NUMBER OF INFANT DEATHS PER 1,000 LIVE BIRTHS

TABLE 35
RESIDENT INFANT DEATHS BY RACE OF MOTHER AND MONTH OF FIRST PRENATAL VISIT
STATE OF HAWAII, 1978

RACE OF MOTHER		NO.	RATE*	MONTH OF FIRST PRENATAL VISIT										
				1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	NONE	UNKNOWN
ALL RACES	NUMBER	186	11.1	28	51	39	29	13	8	5	4		3	6
	RATE*	11.1	--	13.2	9.0	9.3	14.4	11.6	12.8	12.4	14.3	--	14.9	--
CAUCASIAN		49	9.5	4	20	11	6	3	1	1	1		2	
HAWAIIAN		2	14.6				1	1						
PART HAWAIIAN		54	15.5	6	13	13	9	4	4	3	1		1	
CHINESE		3	4.9	1		1				1				
FILIPINO		33	11.0	10	8	5	5	2	2		1			
JAPANESE		24	10.1	5	9	7	2	1						
PUERTO RICAN		3	11.2	2			1							
KOREAN		4	13.8			1	1	1			1			
SAMOAN		2	4.3				2							
NEGRO		3	9.2		1	1	1							
PORTUGUESE		1	6.3					1						
VIETNAMESE		—	--											
OTHER RACES		8	21.3				1		1					6
UNKNOWN														

* NUMBER OF INFANT DEATHS PER 1,000 LIVE BIRTHS

TABLE 36
RESIDENT INFANT MORTALITY BY RACE OF CHILD AND AGE, PREMATURE INFANT DEATHS
STATE OF HAWAII, 1978

RACE OF CHILD	NUMBER OF INFANT DEATHS AGE AT DEATH (DAYS)					INFANT DEATH RATE[a]					PREMATURE INFANTS WHO DIED[d]		PERINATAL DEATHS[e]	
	TOTAL	UNDER 1 DAY	1-6	7-27	28 DAYS TO 11 MOS	TOTAL	UNDER 1 DAY	UNDER 1 WEEK	UNDER 28 DAYS	28 DAYS TO 11 MOS	NO.	RATE[b]	NO.	RATE[c]
ALL RACES	186	74	34	19	59	11.1	4.4	6.5	7.6	3.5	1184	98.8	257	15.2
CAUCASIAN	35	15	5	3	12	9.0	3.8	5.1	5.9	3.1	227	101.3		
HAWAIIAN	1	1				18.9	18.9	18.9	18.9	--	11	90.9		
PART HAWAIIAN	69	21	15	8	25	13.8	4.2	7.2	8.8	5.0	393	91.6		
CHINESE	1	1				1.8	1.8	1.8	1.8	--	26	38.5		
FILIPINO	33	13	5	5	10	11.7	4.6	6.4	8.1	3.5	263	68.4		
JAPANESE	26	14	6		6	11.1	6.0	8.5	8.5	2.6	166	132.5		
PUERTO RICAN	7	4	2	1	--	31.0	17.8	26.5	31.0	--	22	272.7		
KOREAN	3	1		1	1	12.3	4.1	4.1	8.2	4.1	11	181.8		
SAMOAN	4	2			2	8.2	4.1	4.1	4.1	4.1	17	235.3		
NEGRO	4	2		1	1	8.7	4.4	4.4	6.6	2.2	39	76.9		
PORTUGUESE	2		1		1	13.3	--	6.7	6.7	6.7	10	100.0		
VIETNAMESE	--					--					--	--		
OTHER RACES	1				1	2.5				2.5				
UNKNOWN	--					--					--	--		

[a] NUMBER OF INFANT DEATHS PER 1,000 LIVE BIRTHS
[b] NUMBER OF DEATHS PER 1,000 PREMATURE LIVE BIRTHS
[c] NUMBER OF DEATHS PER 1,000 LIVE BIRTHS PLUS FETAL DEATHS OF 20 WEEKS OR MORE GESTATION
[d] INFANTS OF 2500 GRAMS (5 LBS. 8 OZ.) OR LESS ARE CONSIDERED PREMATURE
[e] INFANT DEATHS UNDER 1 WEEK OF AGE AND FETAL DEATHS OF 20 WEEKS OR MORE GESTATION

TABLE 37

RESIDENT INFANT MORTALITY BY SELECTED CAUSES BY BIRTH WEIGHT, SEX AND AGE, NEONATAL DEATHS
STATE OF HAWAII, 1978

CAUSE OF DEATH[a]	TOTAL			BIRTH WEIGHT		SEX		AGE AT DEATH				NEONATAL DEATH[c]	
	NO.	RATE[b]	PERCENT	2500 GMS UNDER	OVER 2500 GMS	MALE	FEMALE	UNDER 1 DAY	1-6 DAYS	7-27 DAYS	28 DAYS TO 11 MOS	NO.	RATE[b]
ALL CAUSES	186	11.1	100.0	117	69	111	75	74	34	19	59	127	7.8
DIARRHEAL DISEASE (009)	2	.1	1.1	2		1	1			2		2	.1
SEPTICEMIA (038)	6	.4	3.2	3	3	3	3	4	1		1	5	.3
VIRAL DISEASE (079)	1	.1	.5	1		1					1		
MENINGITIS (320)	3	.2	1.6		3	1	2			1	2	1	.1
ACUTE BRONCHITIS (466)	1	.1	.5	1		1					1		
PNEUMONIA (480-486)	7	.4	3.8	2	5	5	2			1	6	1	.1
EMPHYSEMA (492)													
HERNIA AND INTESTINAL OBSTRUCTION (550-553, 560)													
CONGENITAL ANOMALIES (740-759)	39	2.3	21.0	15	24	19	20	11	8	5	15	24	1.4
CONGENITAL ANOMALIES OF HEART (746)	16	1.0	8.6	3	13	8	8		5	3	8	8	.2
TOXEMIA OF PREGNANCY (762)													
DIFFICULT LABOR (764-768)													
CONDITIONS OF PLACENTA (770)	1	.1	.5	1		1		1				1	.1
BIRTH INJURY WITHOUT MENTION OF CAUSE (772)	2	.1	1.1	2		2		1	1			2	.1
HEMOLYTIC DISEASE OF NEWBORN (774-775)	3	.2	1.6	2	1	1	2	3				3	.2
HYALINE MEMBRANE DISEASE (776.1)	19	1.1	10.2	17	2	12	7	5	11	1	2	17	1.0
RESPIRATORY DISTRESS SYNDROME (776.2)	15	.9	8.1	13	2	10	5	4	6	4	1	14	.8
ASPHYXIA OF NEWBORN, UNSPECIFIED (776.9)	4	.2	2.2	4		2	2	4				4	.2
IMMATURITY, UNQUALIFIED (777)	28	1.8	15.1	28		14	14	27	1			28	1.8
HEMMORRHAGIC DISEASE OF NEWBORN (778.2)													
ALL OTHER CONDITIONS OF NEWBORN (REMAINDER 760-778)	15	.9	8.1	9	6	13	2	11	2	2		15	.9
ACCIDENTS (800-949)	2	.1	1.1	2		2				1	1	1	.1
ALL OTHER CAUSES (RESIDUAL)	38	2.3	20.4	15	23	23	15	3	4	2	29	9	.5

[a] 8TH ICDA RUBRICS
[b] NUMBER OF INFANT DEATHS PER 1,000 LIVE BIRTHS
[c] DEATHS UNDER 28 DAYS OLD

TABLE 38

STANDARD FETAL DEATHS BY PLACE OF OCCURRENCE REALLOCATED TO USUAL RESIDENCE OF MOTHER AND GESTATION PERIOD
STATE OF HAWAII, 1978

GEOGRAPHIC AREA		TOTAL BY PLACE OF OCCURRENCE		TOTAL BY PLACE OF RESIDENCE			GESTATION PERIOD IN WEEKS										
		NO.	RATIO[a]	NO.	RATIO[a]	RATE[b]	UNDER 12	12	13	14	15	16-19	20-27	28-35	36-39	40 & OVER	UNKN
TOTAL RECORDED		1,510	90.1	1,510	...	...	887	157	63	69	51	89	75	38	28	11	42
STATE OF HAWAII	NUMBER	1,510	90.1	1,467	87.8	80.5	856	152	61	68	51	88	75	35	28	11	42
	PERCENT			100.0	...	...	58.4	10.4	4.2	4.6	3.5	6.0	5.1	2.4	1.9	.7	2.9
COUNTY OF HAWAII		113	66.4	114	66.5	62.4	59	6	8	4	3	16	8	2	5	1	3
CITY OF HILO		104	94.8	38	60.1	56.7	17	3	2			6	6	2	1		1
BALANCE OF COUNTY		9	14.9	76	70.3	65.7	42	3	6	3	3	10	2		4	1	2
COUNTY OF HONOLULU		1,232	93.9	1,192	91.7	84.0	698	134	48	58	47	58	56	28	20	10	35
CITY OF HONOLULU		1,127	94.9	472	90.2	82.7	292	47	16	17	20	20	23	11	4	5	17
BALANCE OF COUNTY		105	84.4	720	92.7	84.8	406	87	32	41	27	38	33	17	16	5	18
COUNTY OF KALAWAO		—	—	—	—	—											
COUNTY OF KAUAI		58	77.5	55	72.6	67.4	32	8	3	3		4	4	1			
ISLAND OF KAUAI		58	77.5	54	71.4	66.7	32	8	3	3		4	4				
ISLAND OF NIIHAU		—	—	1	500.0	333.3								1			
COUNTY OF MAUI		107	90.0	106	85.4	78.7	67	4	2	4	1	10	7	4	3		4
ISLAND OF LANAI		1	83.3	2	83.3	76.9	1						1				
ISLAND OF MAUI		106	97.0	96	87.2	79.5	62	4	2	4	1	9	6	2	2		4
ISLAND OF MOLOKAI		—	—	8	69.0	64.5	4					1		2	1		
NON-RESIDENT		—	—	40	—	—	30	4	1	1		1		3			
UNKNOWN		—	—	3	—	—	1	1	1								

[a] NUMBER OF FETAL DEATHS PER 1,000 LIVE BIRTHS
[b] NUMBER OF FETAL DEATHS PER 1,000 DELIVERIES (LIVE BIRTHS AND STANDARD FETAL DEATHS)

TABLE 39

STANDARD FETAL DEATHS BY PLACE OF OCCURRENCE REALLOCATED TO USUAL RESIDENCE OF MOTHER BY RACE
STATE OF HAWAII, 1978

GEOGRAPHIC AREA		TOTAL BY PLACE OF OCCURRENCE		TOTAL BY PLACE OF RESIDENCE			RACE OF FETUS													
		NO.	RATIO a/	NO.	RATIO a/	RATE b/	CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUER RCAN	KOREAN	SAMOAN	NEGRO	PORTGUESE	VIETMESE	OTHER	UNKN
TOTAL RECORDED		1510	90.1	1510	90.1	82.6	544	16	276	39	245	176	22	37	21	53	13	9	32	27
STATE OF HAWAII	NUMBER	1510	90.1	1467	87.8	80.7	511	16	273	38	243	175	22	37	21	52	13	9	31	26
	RATIO a/	90.1	...	87.8	...	...	130.7	301.9	54.6	67.1	86.7	74.9	102.3	152.9	43.3	113.5	66.0	187.5	77.7	
	RATE b/	82.7	...	80.7	...	...	115.6	231.9	51.8	62.9	79.8	69.7	92.8	132.6	41.5	102.0	61.9	157.9	72.1	
COUNTY OF HAWAII		113	66.4	114	66.5	62.4	21	1	43	1	20	17	4	1			1	1	4	
CITY OF HILO		104	94.8	38	60.1	56.7	6	1	18		7	4	2							
BALANCE OF COUNTY		9	14.9	76	70.3	65.7	15		25	1	13	13	2	1			1	1	4	
COUNTY OF HONOLULU		1232	93.9	1192	91.7	84.0	442	12	191	35	191	131	15	36	21	51	7	8	26	26
CITY OF HONOLULU		1127	94.9	472	90.2	82.7	146	5	64	24	79	69	3	27	6	15		5	15	14
BALANCE OF COUNTY		105	84.4	720	92.7	84.8	296	7	127	11	112	62	12	9	15	36	7	3	11	12
COUNTY OF KALAWAO		—	—	—	—	—														
COUNTY OF KAUAI		58	77.5	55	72.6	67.4	12	2	9		20	10	2							
ISLAND OF KAUAI		58	77.5	54	71.4	66.7	12	1	9		20	10	2							
ISLAND OF NIIHAU		—	—	1	500.0	333.3		1												
COUNTY OF MAUI		107	90.0	106	85.4	78.7	36	1	30	2	12	17	1			1	5		1	
ISLAND OF LANAI		1	83.3	2	83.3	76.9	1					1								
ISLAND OF MAUI		106	97.0	96	87.2	79.5	34	1	26	2	9	16	1			1	5		1	
ISLAND OF MOLOKAI		—	—	8	69.0	64.5	1		4		3									
NON-RESIDENT		—	—	40	—	—	32		1	1	2	1				1			1	1
UNKNOWN		—	—	3	—	—	1		2											

a/ NUMBER OF FETAL DEATHS PER 1,000 LIVE BIRTHS
b/ NUMBER OF FETAL DEATHS PER 1,000 DELIVERIES (LIVE BIRTHS AND STANDARD FETAL DEATHS)

TABLE 40

STANDARD FETAL DEATHS BY CAUSE AND GESTATION PERIOD
STATE OF HAWAII, 1978

CAUSE		TOTAL		GESTATION PERIOD IN WEEKS										
	CODE*	NUMBER	PERCENT	UNDER 12	12	13	14	15	16-19	20-27	28-35	36-39	40 & OVER	UNKN
ALL CAUSES	ALL	1,510	100.0	887	157	63	69	51	89	75	38	28	11	42
SELF INDUCED ABORTION	7731													
CRIMINAL ABORTION	7732													
THERAPEUTIC ABORTION	7733	3	.2				1		1	1				
ALL OTHER ABORTIONS	7734	172	11.4	93	21	9	13	9	15	8				4
DESTRUCTION TO FACILITATE BIRTH	7739													
CONGENITAL ANOMALIES	740-759	6	.4						2	1	3			
CHRONIC CIRCULATORY AND GENITO-URINARY DISEASES IN MOTHER	760	4	.3	1						2	1			
MATERNAL CONDITIONS UNRELATED TO PREGNANCY	761	3	.2						1	1		1		
COMPLICATIONS OF PREGNANCY AND CHILDBIRTH	762-763 769	144	9.5	104	4	3	1	1	6	15	1	1	1	9
DIFFICULT LABOR WITH OR WITHOUT MENTION OF BIRTH INJURY	764-768	2	.1								1	1		
CONDITIONS OF PLACENTA AND UMBILICAL CORD	770-771	32	2.1	3	1		1			9	5	9	4	
BIRTH INJURY WITHOUT MENTION OF CAUSE	772	1	.1								1			
HEMOLYTIC DISEASE OF NEWBORN	774-775	1	.1								1			
OTHER CONDITIONS OF FETUS	778	1	.1										1	
MACERATION	7790	1	.1								1			
UNKNOWN	7799	1,126	74.6	681	131	51	53	41	63	36	20	16	4	28
ALL OTHER CAUSES	RESIDUAL	14	.9	5					1	2	4		1	1

TABLE 41

STANDARD FETAL DEATHS BY AGE OF MOTHER AND GESTATION PERIOD
STATE OF HAWAII, 1978

AGE OF MOTHER IN YEARS	TOTAL			GESTATION PERIOD IN WEEKS: NUMBER											GESTATION PERIOD IN WEEKS: PERCENT						
	NO.	RATIO*	PER-CENT	<12	12	13	14	15	16 TO 19	20 TO 27	28 TO 35	36 TO 39	40 & OVER	UNKN	UNDER 12	UNDER 20	UNDER 28	UNDER 36	36 TO 39	40 & OVER	UNKN
ALL AGES	1,510	90.3	100.0	887	157	63	69	51	89	75	38	28	11	42	58.7	87.2	92.1	94.6	1.9	.7	2.8
UNDER 15	3	150.0	.2	3											100.0	100.0	100.0	100.0			
15 - 17	49	84.0	3.2	20	6	1	3	2	7	6	1	2	1		40.8	79.6	91.8	93.9	4.1	2.0	
18 - 19	113	76.0	7.5	59	10	5	8	6	7	7	4	3		4	52.2	84.1	90.3	93.8	2.7		3.5
20 - 24	422	76.8	27.9	246	45	19	18	11	26	20	14	8	4	11	58.3	86.5	91.2	94.5	1.9	.9	2.6
25 - 29	441	82.4	29.2	268	41	19	17	17	24	16	11	6	4	18	60.8	87.5	91.2	93.7	1.4	.9	4.1
30 - 34	310	108.2	20.5	183	36	13	14	11	18	16	5	5	2	7	59.0	88.7	93.9	95.5	1.6	.6	2.3
35 - 39	121	153.2	8.0	76	14	6	6	4	6	4		3		2	62.8	92.6	95.9	95.9	2.5		1.7
40 - 44	37	296.0	2.5	23	3		2		1	5	2	1			62.2	78.4	91.9	97.3	2.7		
45 - 49	5	1666.7	.3	3			1				1				60.0	80.0	80.0	100.0			
50 & OVER																					
UNKNOWN	9	---	.6	6	2					1					66.7	88.9	100.0	100.0			

*NUMBER OF FETAL DEATHS PER 1,000 LIVE BIRTHS

TABLE 42

STANDARD FETAL DEATHS BY RACE OF MOTHER AND AGE OF MOTHER
STATE OF HAWAII, 1978

ALL RACES		ALL RACES		RACE OF MOTHER													
		NO.	PER CENT	CAUCSIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERRCAN	KOREAN	SAMOAN	NEGRO	PORTGESE	VIETMESE	OTHER	UNKN
	NUMBER	1510	100.0	592	23	231	39	252	165	23	42	21	45	10	9	25	33
	PERCENT	100.0		39.2	1.5	15.3	2.6	16.7	10.9	1.5	2.8	1.4	3.0	.7	.6	1.7	2.2
UNDER 15		3	.2	1		1		1									
15 - 17		49	3.2	11	1	19		9	2	1			1	1		1	3
18 - 19		113	7.5	55	5	26		9	3	7	1		2	1		2	2
20 - 24		422	27.9	182	10	76	8	53	35	11	2	5	20	4	2	7	7
25 - 29		441	29.2	195	1	57	14	67	39	2	20	7	16	1	5	6	11
30 - 34		310	20.5	99	6	36	12	66	61	1	8	3	4	2	1	5	6
35 - 39		121	8.0	38		9	5	31	17	1	8	4	2	1		3	2
40 - 44		37	2.5	8		3		14	7		1	1			1	1	1
45 - 49		5	.3	1				1	1		1	1					
50 & OVER																	
UNKNOWN		9	.6	2		4		1			1						1

TABLE 43

ELECTIVE ABORTIONS BY RACE OF MOTHER AND AGE OF MOTHER
STATE OF HAWAII, 1978

MOTHERS AGE IN YEARS		NO.	PERCENT	RACE OF MOTHER													
				CAUCA-SIAN	HAWN	PART HAWN	CHIN-NESE	FILI-PINO	JAPA-NESE	PUERTO RICAN	KO-REAN	NEGRO	SA-MOAN	VIET-NAMESE	PORTU GESE	OTHER RACES	UN-KNOWN
	NUMBER	6,014	...	1975	43	718	221	735	958	42	274	143	99	28	10	109	659
	PERCENT	...	100.0	32.8	.7	11.9	3.7	12.2	15.9	.7	4.6	2.4	1.6	.5	.2	1.8	11.0
UNDER 15		32	0.5	8	—	3	1	9	3	—	1	1	2	—	—	—	4
15 - 17		427	7.1	118	2	109	11	56	67	1	4	14	4	—	2	3	36
18 - 19		814	13.6	268	10	108	28	91	142	10	12	22	13	1	2	19	88
20 - 24		2,138	35.5	689	13	278	70	228	354	23	73	74	33	7	3	41	252
25 - 29		1,414	23.5	546	10	131	44	169	189	5	88	21	28	13	—	25	144
30 - 34		752	12.5	242	5	59	44	97	128	1	62	6	12	3	1	12	80
35 - 39		275	4.6	72	2	18	12	47	46	—	23	4	6	2	2	9	32
40 - 44		140	2.3	25	1	10	9	37	24	1	10	1	1	2	—	—	19
45 - 49		14	0.2	5	—	1	1	1	4	—	—	—	—	—	—	—	2
50 & OVER		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
UNKNOWN		8	0.2	2	—	1	1	—	1	—	1	—	—	—	—	—	2

TABLE 44

ELECTIVE ABORTIONS BY AGE OF MOTHER AND LENGTH OF GESTATION PERIOD
STATE OF HAWAII, 1978

AGE OF MOTHER	TOTAL	GESTATION PERIOD IN WEEKS																	
		UNDER 6	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21 & OVER	UNKN
ALL AGES	6,014	155	973	777	1,617	467	876	206	369	63	102	50	112	45	90	27	36	38	11
UNDER 15	32	—	2	4	4	—	7	4	4	—	2	1	—	1	1	—	1	1	—
15 - 17	427	2	37	40	102	27	70	20	46	5	17	11	12	7	14	4	9	3	1
18 - 19	814	12	119	96	203	59	130	35	50	17	21	7	24	6	19	5	3	5	3
20 - 24	2,138	55	334	262	607	158	296	70	143	20	30	19	44	21	34	12	13	18	2
25 - 29	1,414	54	279	212	366	112	195	48	58	13	20	5	17	7	13	4	3	6	2
30 - 34	752	20	136	104	216	68	107	18	41	2	9	3	10	2	3	1	5	4	3
35 - 39	275	6	41	39	74	28	49	4	17	5	2	2	1	—	4	—	2	1	—
40 - 44	140	5	21	17	38	15	18	7	8	1	1	2	4	1	1	1	—	—	—
45 - 49	14	—	2	3	6	—	1	—	1	—	—	—	—	—	1	—	—	—	—
50 & OVER	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
UNKNOWN	8		2	—	1	—	3	—	1	—	—	—	—	—	—	—	—	—	—

TABLE 45

ELECTIVE ABORTIONS BY LEGITIMACY AND RACE OF MOTHER
STATE OF HAWAII, 1978

LEGITIMACY STATUS	TOTAL	RACE OF MOTHER													
		CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERTO RICAN	KOREAN	NEGRO	SAMOAN	PORTUGESE	VIETNAMESE	OTHER RACES	UNKNOWN
TOTAL	6,014	1,975	43	718	221	735	958	42	274	143	99	28	10	109	659
LEGITIMATE	1,853	469	16	194	76	342	264	11	137	87	36	18	1	41	171
ILLEGITIMATE	4,043	1,467	26	530	144	381	674	30	134	55	62	8	9	65	458
UNKNOWN	118	39	1	4	1	12	20	1	3	1	1	2		3	30

TABLE 46

ELECTIVE ABORTIONS BY LEGITIMACY STATUS AND AGE OF MOTHER
STATE OF HAWAII, 1978

LEGITIMACY STATUS	TOTAL	AGE OF MOTHER IN YEARS									
		UNDER 15	15-17	18-19	20-24	25-29	30-34	35-39	40-41	45-49	50 & OVER	UNKNOWN
TOTAL	6,014	32	427	814	2,138	1,414	752	275	140	14		8
LEGITIMATE	1,853		12	94	508	559	388	168	110	10		4
ILLEGITIMATE	4,043	32	408	706	1,590	826	343	100	30	4		4
UNKNOWN	118		7	14	40	29	21	7				

TABLE 47

ELECTIVE ABORTIONS BY TYPE OF PROCEDURE AND GESTATION PERIOD
STATE OF HAWAII, 1978

TYPE OF PROCEDURE	TOTAL	GESTATION PERIOD IN WEEKS													
		UNDER 6	6	7	8	9	10	11	12	13	14	15	16	17-19	20 & OVER	UNKN
TOTAL	6,014	155	973	777	1,617	467	876	206	369	63	102	50	112	162	74	11
SUCTION CURETTAGE	5,206	114	848	682	1,529	456	848	202	359	57	76	17	7	5	1	5
SHARP D & C	102	2	11	5	20	7	22	3	6	2	1	6	10	4	1	2
AMNIOTIC FLUID EXCHANGE	7												3	3	1	
HYSTEROTOMY	2								1						1	
HYSTERECTOMY	3		2											1		
PROSTAGLANDIN	291						2			1	17	20	81	117	52	1
OTHER	389	39	109	86	67	3	3	1	3	3	8	7	10	29	18	3
NOT STATED	14		3	4	1	1	1						1	3		
UNKNOWN																

TABLE 48

ELECTIVE ABORTIONS BY COUNTY OF RESIDENCE AND COUNTY OF OCCURRENCE
STATE OF HAWAII, 1978

COUNTY OF RESIDENCE		NO.	PER-CENT	ABORTIONS PER 1,000 LIVE BIRTHS	COUNTY OF OCCURRENCE																
						COUNTY OF HAWAII			COUNTY OF HONOLULU			COUNTY OF KAUAI				COUNTY OF MAUI					
					TOTAL	TOT	HILO CITY	BAL	TOT	HON CITY	BAL	KALAWAO CNTY	TOT	KAUI ISL	NIIHAU ISL	TOT	MAUI ISL	LANAI ISL	MOLKAI ISL	NON RES	UNK
TOTAL RECORDED	NUMBER	6014	100.0	358.8	6014	406	292	114	5157	4950	207		140	140		311	311				
	PERCENT	100.0			100.0	6.8	4.9	1.9	85.7	82.3	3.4		2.3	2.3		5.2	5.2				
STATE OF HAWAII		5806	96.5	347.3	5806	406	292	114	4950	4743	207		140	140		310	310				
COUNTY OF HAWAII		484	8.0	282.5	484	405	291	114	78	78			1	1							
CITY OF HILO		215	3.6	340.2	215	175	167	8	39	39			1	1							
BALANCE OF COUNTY		269	4.5	248.8	269	230	124	106	39	39											
COUNTY OF HONOLULU		4666	77.6	358.8	4666	1	1		4663	4458	205					2	2				
CITY OF HONOLULU		2783	46.3	531.6	2783				2781	2771	10					2	2				
BALANCE OF COUNTY		1883	31.3	242.4	1883	1	1		1882	1687	195										
COUNTY OF KALAWAO																					
COUNTY OF KAUAI		210	3.5	277.0	210				71	71			139	139							
ISLAND OF KAUAI		210	3.5	277.8	210				71	71			139	139							
ISLAND OF NIIHAU		--	--	--																	
COUNTY OF MAUI		446	7.4	359.4	446				138	136	2					308	308				
ISLAND OF MAUI		438	7.3	397.8	438				130	128	2					308	308				
ISLAND OF LANAI		3		125.0	3				3	3											
ISLAND OF MOLOKAI		5	.1	43.1	5				5	5											
NON-RESIDENT		201	3.3	4,568.2	201				200	200						1	1				
UNKNOWN		7	.1	7,000.0	7				7	7											

TABLE 49

MARRIAGES BY PLACE AND MONTH OF OCCURRENCE
STATE OF HAWAII, 1978

PLACE OF OCCURR	TOTAL	RATE*	MONTH OF OCCURRENCE												
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
TOTAL	10,736	12.0	670	733	772	880	819	1,062	1,001	1,083	914	803	924	1,074	1
PERCENT	100.0	...	6.2	6.8	7.2	8.2	7.6	9.9	9.3	10.1	8.5	7.5	8.6	10.0	
STATE OF HAWAII	10,733	12.0	668	733	772	880	818	1,062	1,001	1,083	914	803	924	1,074	1
COUNTY OF HAWAII	939	11.6	55	69	72	71	63	99	87	102	75	58	93	95	
CITY OF HILO	421	---	24	28	28	32	28	42	51	56	28	23	47	34	
BAL. OF COUNTY	518	---	31	41	44	39	35	57	36	46	47	35	46	61	
COUNTY OF HONOLUL	7,835	10.9	503	544	565	637	576	754	761	809	668	581	652	784	1
CITY OF HONO.	5,572	---	355	394	419	441	427	526	533	557	475	426	462	557	
BAL. OF COUNTY	2,263	---	148	150	146	196	149	228	228	252	193	155	190	227	1
COUNTY OF KALAWAO	---	---													
COUNTY OF KAUAI	922	26.6	42	54	61	96	83	92	80	79	83	83	84	85	
ISL OF KAUAI	919	26.7	41	53	61	96	83	92	80	79	83	83	84	84	
ISL OF NIIHAU	3	---	1	1										1	
COUNTY OF MAUI	1,037	16.9	68	66	74	76	96	117	73	93	88	81	95	110	
ISL OF LANAI	11	5.2		1	2		2	1	2	1	1		1		
ISL OF MAUI	971	18.4	66	63	65	70	90	110	66	90	80	76	91	104	
ISL OF MOLOKAI	55	8.6	2	2	7	6	4	6	5	2	7	5	3	6	
UNKNOWN	3	---	2				1								

*RATE PER 1,000 POPULATION

TABLE 50

MARRIAGES BY AGE OF GROOM AND AGE OF BRIDE
STATE OF HAWAII, 1978

AGE OF GROOM	TOT	PERCENT	AGE OF BRIDE														
			15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 &>	UNK
ALL AGES	10,736	100.0	312	1250	3646	2632	1268	585	366	257	179	121	55	38	21	5	1
PERCENT			2.9	11.6	34.0	24.5	11.8	5.4	3.4	2.4	1.7	1.1	.5	.4	.2		
15 - 17	38	.4	17	18	3												
18 - 19	558	5.2	121	283	118	27	5	2	1						1		
20 - 24	3,134	29.2	134	731	1795	362	84	15	6	5	1		1				
25 - 29	2,797	26.1	32	144	1161	1133	254	50	18	4	1						
30 - 34	1,633	15.2	6	51	372	660	417	87	28	8	1	1	1				1
35 - 39	889	8.3	2	12	127	268	250	152	46	25	4	2	1				
40 - 44	498	4.6		7	31	99	136	115	75	23	8	4					
45 - 49	414	3.9		3	20	47	73	82	80	78	20	7	3	1			
50 - 54	273	2.5		1	7	17	25	46	54	47	49	19	6	2			
55 - 59	206	1.9			4	12	14	24	36	34	37	38	6	1			
60 - 64	141	1.3			4	6	7	8	12	19	33	24	18	6	3	1	
65 - 69	83	.8				1	3	2	6	8	17	19	12	10	4	1	
70 - 74	60	.6			3			1	4	5	8	7	5	18	8	1	
75 & >	12	.1			1			1		1			2		5	2	
UNKNOWN																	

MEDIAN AGE OF GROOM WITH KNOWN AGES: 27.9

MEDIAN AGE OF BRIDE WITH KNOWN AGES: 25.3

TABLE 51

MARRIAGES BY PREVIOUS MARITAL STATUS OF GROOM AND OF BRIDE BY AGE
STATE OF HAWAII, 1978

AGE IN YEARS		GROOM							BRIDE						
		TOTAL	PERCENT	NEVER MARRIED	WIDOWED	DIVORCED	ANNUL-MENT	UNKNOWN	TOTAL	PERCENT	NEVER MARRIED	WIDOWED	DIVORCED	ANNUL-MENT	UNKNOWN
TOTAL	NUMBER	10,736	100.00	6,822	311	3,575	27	1	10,736	100.00	6,951	340	3,422	23	
	PERCENT	100.00	--	63.5	2.9	33.3	.3		100.00	--	64.7	3.2	31.9	.2	
15 - 17		38	.4	38					312	2.9	307	1	4		
18 - 19		558	5.2	556		2			1,250	11.6	1,224		26		
20 - 24		3,134	29.2	2,949	1	180	4		3,646	34.0	3,167	9	465	5	
25 - 29		2,797	26.1	2,148	10	634	4	1	2,632	24.5	1,665	25	934	8	
30 - 34		1,633	15.2	757	11	859	6		1,268	11.8	411	32	821	4	
35 - 39		889	8.3	216	9	660	4		585	5.4	92	30	462	1	
40 - 44		498	4.6	73	16	404	5		366	3.4	40	28	297	1	
45 - 49		414	3.9	31	34	347	2		257	2.4	18	37	202		
50 - 54		273	2.5	13	40	218	2		179	1.7	14	47	115	3	
55 - 59		206	1.9	13	52	141			121	1.1	7	46	68		
60 - 64		141	1.3	11	50	80			55	.5	2	38	14	1	
65 - 69		83	.8	8	42	33			38	.4	1	27	10		
70 - 74		60	.6	5	40	15			21	.2	2	16	3		
75 & OVER		12	.1	4	6	2			5			4	1		
UNKNOWN									1		1				

TABLE 52

MARRIAGES BY OCCUPATION OF GROOM AND OF BRIDE
STATE OF HAWAII, 1978

CODE	OCC OF GROOM	TOTAL	PERCENT	OCCUPATION CODE OF BRIDE											
				0	1	2	3	4	5	6	7	8	9	10	UNKNOWN
TOTAL		10,736	100.0	3,517	1,453	491	2,651	719	84	114	1,219	10	53	420	5
PERCENT		100.00	...	32.8	13.5	4.6	24.7	6.7	.8	1.1	11.4	.1	.5	3.9	
0	NO OCCUPATION	746	6.9	435	78	13	109	37	1	1	53	1	2	14	2
1	PRO,TECH &KIND	1,719	16.0	302	661	92	425	105	11	10	108		1	3	1
2	FARM,MAN &OFFI	1,266	11.8	261	195	162	377	114	15	18	120	1	2	1	
3	CLER & KINDRED	515	4.8	135	50	16	212	38	1	4	54		3	2	
4	SALES WORKERS	762	7.1	149	130	56	234	116	4	4	67		1		1
5	CRAFT,FOREMEN	1,463	13.6	475	115	68	453	90	29	20	199	4	6	4	
6	OPERATIVES	673	6.3	245	28	18	193	42	5	20	114		8		
7	PRI HOUSEHOLD	891	8.3	268	62	27	217	66	1	15	227		4	4	
8	FARM LABORERS	92	.9	42	4	1	14	6		4	18	2	1		
9	LABOR EX FARM	466	4.3	184	27	9	93	30	9	7	83	2	21	1	
10	ARMED FORCES	2,136	19.9	1,019	102	29	322	74	8	11	175		4	391	
	UNKNOWN	8	.1	2	1		2	1			1				1

TABLE 53

MARRIAGES BY PREVIOUS MARITAL STATUS OF GROOM AND OF BRIDE
STATE OF HAWAII, 1978

MARR. STAT. GROOM	TOTAL	PERCENT	MARITAL STATUS OF BRIDE				
			NEVER MARRIED	WIDOWED	DIVORCED	ANNULMENT	UNKNOWN
TOTAL	10,736	100.0	6,951	340	3,422	23	
PERCENT	100.00	...	64.7	3.2	31.9	.2	
NEVER MARRIED	6,822	63.5	5,621	65	1,127	9	
WIDOWED	311	2.9	39	109	161	2	
DIVORCED	3,575	33.3	1,279	165	2,121	10	
ANNULMENT	27	.3	11	1	13	2	
UNKNOWN	1		1				

TABLE 54

MARRIAGES BY NUMBER OF TIMES GROOM AND BRIDE PREVIOUSLY MARRIED
STATE OF HAWAII, 1978

NO. GROOM MARRIED	TOTAL	PERCENT	TIMES PREVIOUSLY MARRIED - BRIDE						
			NONE	1	2	3	4	5 OR >	UNKNOWN
TOTAL	10,736	100.0	6,951	3,078	600	89	16	2	
PERCENT	100.00	...	64.7	28.7	5.6	.8	.1		
NONE	6,823	63.6	5,622	1,070	113	15	3		
1	3,072	28.6	1,131	1,609	284	41	6	1	
2	705	6.6	178	334	170	18	4	1	
3	114	1.1	18	59	23	12	2		
4	17	.2	1	6	7	2	1		
5 & >	4		1		2	1			
UNKNOWN	1				1				

TABLE 55

MARRIAGES BY RACE AND AGE OF GROOM
STATE OF HAWAII, 1978

RACE OF GROOM	TOT.	PERCENT	AGE OF GROOM													
			15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 &>	UNK
ALL RACES	10,736	100.0	38	558	3134	2797	1633	889	498	414	273	206	141	83	60	12	
CAUCASIAN	5,425	50.5	6	191	1347	1211	920	574	321	301	207	146	107	49	41	4	
HAWAIIAN	86	.8	1	8	19	23	9	7	5	2	3	3	3	1	2		
PART HAWN	1,329	12.4	18	159	511	303	135	80	46	34	15	16	6	1	4		
CHINESE	383	3.6	1	15	80	168	77	13	8	4	4	4	2	4	2	1	
FILIPINO	957	8.9	5	77	348	231	112	67	27	25	14	11	11	17	8	4	
JAPANESE	1,480	13.8	2	31	363	604	278	84	46	30	12	14	6	5	2	3	
PUERTO RCN	113	1.1	1	13	52	17	8	4	3	3	5	3	2	1	1		
KOREAN	125	1.2			25	38	16	13	16	5	5	2	2	3			
SAMOAN	165	1.5	1	6	68	48	23	8	7	2			1	1			
NEGRO	421	3.9		43	228	84	28	17	9	5	3	3		1			
PORTUGESE	61	.6	1	8	17	16	5	5	1	2	2	4					
VIETNAMESE	16	.1	1		4	8	1	1	1								
OTHER	174	1.6	1	7	72	45	21	16	8	1	2		1				
UNKNOWN	1					1											

TABLE 56

MARRIAGES BY RACE AND AGE OF BRIDE
STATE OF HAWAII, 1978

RACE OF BRIDE	TOT	PERCENT	AGE OF BRIDE														
			15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 &>	UNK
ALL RACES	10,736	100.0	312	1250	3646	2632	1268	585	366	257	179	121	55	38	21	5	1
CAUCASIAN	5,100	47.5	84	447	1478	1276	741	364	233	174	126	87	42	29	16	2	1
HAWAIIAN	56	.5	2	8	19	5	7	6	3	1	2	2	1				
PART HAWN	1,435	13.4	83	330	562	239	102	56	18	20	12	8	2	2	1		
CHINESE	424	3.9	4	14	177	147	45	11	5	5	5	3	2	3	2	1	
FILIPINO	1,120	10.4	73	198	398	216	112	44	32	20	12	9	3	2	1		
JAPANESE	1,606	15.0	20	109	657	553	131	54	34	23	10	6	4	2	1	2	
PUERTO RCN	116	1.1	7	29	29	15	12	10	6	6	2						
KOREAN	246	2.3	1	10	70	57	50	23	23	4	6	1	1				
SAMOAN	165	1.5	13	29	73	27	14	2	4	1		2					
NEGRO	208	1.9	7	44	89	32	25	5	3	1	1	1					
PORTUGESE	38	.4	5	10	14	2	2		2	1	1	1					
VIETNAMESE	51	.5	3	4	12	23	7	2									
OTHER	170	1.6	10	18	68	39	20	8	3	1	2	1					
UNKNOWN	1					1											

TABLE 57

MARRIAGES BY RESIDENCE OF GROOM AND OF BRIDE
STATE OF HAWAII, 1978

RESID OF GROOM	TOTAL RECORDED	PER CENT	RESIDENCE OF BRIDE															NON RES	UNK
				COUNTY OF HAWAII			COUNTY OF HONOLULU			COUNTY OF KAUAI				COUNTY OF MAUI					
			TOTAL	TOTAL	HILO	BAL	TOTAL	HONO	BAL	KALAWAO	TOTAL	KAUAI	NIIHAU	TOTAL	LANAI	MAUI	MOLOKAI		
TOTAL	10,736	100.0	8,389	770	291	479	6,697	3,512	3,185		298	293	5	624	8	576	40	2,347	
STATE OF HAWAII	8,338	77.7	8,077	751	279	472	6,425	3,367	3,058		297	292	5	604	7	558	39	261	
COUNTY OF HAWAII	759	7.1	753	724	268	456	27	14	13					2		2		6	
CITY OF HILO	257	2.4	255	239	214	25	15	10	5					1		1		2	
BAL. OF COUNTY	502	4.7	498	485	54	431	12	4	8					1		1		4	
COUNTY OF HONOLUL	6,645	61.9	6,402	22	9	13	6,356	3,334	3,022		13	13		11		6	5	243	
CITY OF HONO.	3,290	30.6	3,219	10	6	4	3,194	2,886	308		8	8		7		3	4	71	
BAL. OF COUNTY	3,355	31.3	3,183	12	3	9	3,162	448	2,714		5	5		4		3	1	172	
COUNTY OF KALAWAO																			
COUNTY OF KAUAI	296	2.8	293	1		1	11	6	5		281	276	5					3	
ISL OF KAUAI	291	2.7	288	1		1	11	6	5		276	276						3	
ISL OF NIIHAU	5		5								5		5						
COUNTY OF MAUI	638	5.9	629	4	2	2	31	13	18		3	3		591	7	550	34	9	
ISL OF LANAI	9	.1	9				2		2					7	7				
ISL OF MAUI	589	5.5	580	3	1	2	26	12	14		3	3		548		548		9	
ISL OF MOLOKAI	40	.4	40	1	1		3	1	2					36		2	34		
NONRESIDENTS	2,398	22.3	312	19	12	7	272	145	127		1	1		20	1	18	1	2,086	
UNKNOWN																			

TABLE 58

MARRIAGES BY RACE OF GROOM AND RACE OF BRIDE
STATE OF HAWAII, 1978

RACE OF GROOM	TOTAL	PERCENT	RACE OF BRIDE														OUT MARRIAGES	
			CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERT RICAN	KOREAN	SAMOAN	NEGRO	PORTUGESE	VIETMESE	OTHER RACES	UNKN	TOTAL	RATE/1000
ALL RACES	10,736	100.0	5100	56	1435	424	1120	1606	116	246	165	208	38	51	170	1	4072	379
PERCENT			47.5	.5	13.4	3.9	10.4	15.0	1.1	2.3	1.5	1.9	.4	.5	1.6		37.9	3.5
CAUCASIAN	5,425	50.5	4115	13	340	125	273	302	26	80	24	21	1	29	76		1310	241
HAWAIIAN	86	.8	32	11	27		6	3	4		1		1		1		75	872
PART HAWN	1,329	12.4	328	11	558	27	172	153	24	19	12	4	8	2	11		771	580
CHINESE	383	3.6	68		49	143	14	93		12				2	2		240	626
FILIPINO	957	8.9	158	3	147	13	504	91	11	13	3	1	4	1	8		453	473
JAPANESE	1,480	13.8	188	7	131	98	68	908	4	51	3	3	3	3	13		572	386
PUERTO RCN	113	1.1	26	2	33	1	17	4	18	1	2	1	6		2		95	840
KOREAN	125	1.2	22		11	7	3	20		61			1				64	512
SAMOAN	165	1.5	18	2	30	1	5	2	1	2	100				4		65	393
NEGRO	421	3.9	82	4	62	6	32	11	21	4	14	178			7		243	577
PORTUGESE	61	.6	7		18	1	11	4	4				13		3		48	786
VIETNAMESE	16	.1				1		1						13	1		3	187
OTHER	174	1.6	55	3	29	1	15	14	3	3	6		1	1	42	1	132	758
UNKNOWN	1		1														1	1000
OUT MARRIAGES	4,072	37.9	985	45	877	281	616	698	98	185	65	30	25	38	128	1		
RATE/1000	379		193	803	611	662	550	434	844	752	393	144	657	745	752	1000		

TABLE 59

DIVORCES AND ANNULMENTS BY PLACE AND MONTH OF OCCURRENCE
STATE OF HAWAII, 1978

COUNTY OF OCCURRENCE		YEAR		MONTH OF OCCURRENCE											
		NUMBER	RATE*	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
STATE OF HAWAII	NUMBER	4,837	5.4	311	332	473	404	481	398	420	428	395	415	382	398
	PERCENT	100.0		6.4	6.9	9.8	8.4	9.9	8.2	8.7	8.8	8.2	8.6	7.9	8.2
HAWAII		343	4.2	27	17	45	23	31	42	17	32	19	25	24	41
HONOLULU		3,955	5.5	253	281	393	339	370	301	360	351	323	347	318	319
KAUAI		177	5.1	14	11	12	12	18	22	15	12	17	21	10	13
MAUI		361	5.9	17	23	23	30	61	33	28	33	36	22	30	25
UNKNOWN		1	--					1							

* RATE PER 1,000 RESIDENT POPULATION

TABLE 60

DIVORCES AND ANNULMENTS BY NUMBER OF CHILDREN REPORTED UNDER 18 YEARS
STATE OF HAWAII, 1978

TYPE OF DECREE		TOTAL		NUMBER OF CHILDREN REPORTED UNDER 18 YEARS OF AGE											
		NUMBER	PERCENT	NONE	1	2	3	4	5	6	7	8	9	> 9	UNKNOWN
TOTAL	NUMBER	4,837	100.0	2184	1167	943	316	140	47	18	6	2	1	1	12
	PERCENT	100.0		45.2	24.1	19.5	6.5	2.9	1.0	.4	.1				.2
DIVORCES		4,821	99.7	2175	1166	940	314	140	46	18	6	2	1	1	12
ANNULMENTS		10	.2	6	1	3									
UNKNOWN		6	.1	3			2		1						

TABLE 61

DIVORCES AND ANNULMENTS BY RACE AND AGE OF HUSBAND
STATE OF HAWAII, 1978

RACE OF HUSBAND		ALL AGES		AGE OF HUSBAND														
		NUMBER	PERCENT	UNDER 18	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 & OVER	UN-KNOWN
ALL RACES	NUMBER	4,837	100.0	3	25	686	1197	1057	675	403	289	195	115	67	50	34	5	36
	PERCENT	100.0		.1	.5	14.2	24.7	21.9	14.0	8.3	6.0	4.0	2.4	1.4	1.0	.7	.1	.7
CAUCASIAN		2,371	49.0		15	371	576	530	326	187	135	88	53	41	21	9	3	16
HAWAIIAN		49	1.0			3	14	8	8	6	5	2	2		1			
PART HAWAIIAN		555	11.5		4	72	155	128	88	41	27	19	9	4	3	3		2
CHINESE		154	3.2	1		14	44	33	18	11	12	11	5	2	2	1		
FILIPINO		530	11.0	1	4	86	123	99	63	45	29	13	11	8	20	17	2	9
JAPANESE		576	11.9			42	117	143	90	69	44	37	23	7	1	2		1
PUERTO RICAN		82	1.7			19	20	18	10	6	4	3	1	1				
KOREAN		129	2.7			15	23	26	19	18	15	5	4	1		1		2
SAMOAN		48	1.0	1		6	16	9	9	2	1	2	1					1
NEGRO		167	3.5		2	30	67	26	19	9	5	4	2	1	2			
PORTUGUESE		79	1.6			9	17	14	12	5	6	7	4	2		1		2
VIETNAMESE		3	.1				2			1								
OTHER RACES		93	1.9			19	23	23	13	3	6	4						2
UNKNOWN		1																1

TABLE 62

DIVORCES AND ANNULMENTS BY RACE AND AGE OF WIFE
STATE OF HAWAII, 1978

RACE OF WIFE		ALL AGES		AGE OF WIFE														
		NUMBER	PERCENT	UNDER 18	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 & OVER	UN-KNOWN
ALL RACES	NUMBER	4,837	100.0	18	97	1062	1325	945	538	324	220	126	68	36	16	6		56
	PERCENT	100.0		.4	2.0	22.0	27.4	19.5	11.1	6.7	4.5	2.6	1.4	.7	.3	.1		1.2
CAUCASIAN		2,234	46.2	12	53	522	616	447	234	118	92	56	32	19	10	5		18
HAWAIIAN		42	.9		2	5	6	6	5	7	6	2	1	1				1
PART HAWAIIAN		552	11.4	3	15	142	158	103	64	27	23	9	4	2				2
CHINESE		157	3.2			28	42	38	17	14	9	5	1	3				
FILIPINO		557	11.5	3	13	139	146	90	58	39	21	12	9	4	1	1		21
JAPANESE		654	13.5		8	90	189	126	83	55	48	31	11	6	4			3
PUERTO RICAN		71	1.5		1	15	17	12	8	12	4	2						
KOREAN		257	5.3		1	48	57	70	38	27	8	3	4	1				
SAMOAN		37	.8			9	7	10	3	3			1					4
NEGRO		84	1.7			35	22	12	7	4	2		1					1
PORTUGUESE		68	1.4		3	11	12	10	9	7	7	3	3		1			2
VIETNAMESE		33	.7			4	17	5	3	4								
OTHER RACES		91	1.9		1	14	36	16	9	7		3	1					4
UNKNOWN																		

TABLE 63

DIVORCES AND ANNULMENTS BY RACE OF HUSBAND AND OF WIFE
STATE OF HAWAII, 1978

RACE OF HUSBAND		ALL RACES		RACE OF WIFE													
		NUMBER	PERCENT	CAUCASIAN	HAWN	PART HAWN	CHINESE	FILIPINO	JAPANESE	PUERTO RICAN	KOREAN	SAMOAN	NEGRO	PORTUGUESE	VIETNAMESE	OTHER RACES	UNKNOWN
ALL RACES	NUMBER	4,837	100.0	2234	42	552	157	557	654	71	257	37	84	68	33	91	
	PERCENT	100.0		46.2	.9	11.4	3.2	11.5	13.5	1.5	5.3	.8	1.7	1.4	.7	1.9	
CAUCASIAN		2,371	49.0	1782	9	92	47	108	112	14	106	11	8	9	26	47	
HAWAIIAN		49	1.0	16	9	11		3	1	2	1	3	1	1		1	
PART HAWAIIAN		555	11.5	123	7	218	21	63	62	12	11	1	1	27	1	8	
CHINESE		154	3.2	35	2	18	52	4	38	1	2				1	1	
FILIPINO		530	11.0	79	2	75	6	299	32	5	10	3	1	10	2	6	
JAPANESE		576	11.9	69	3	40	23	31	379	5	21			1		4	
PUERTO RICAN		82	1.7	19	3	19		11	3	18			4	4		1	
KOREAN		129	2.7	11		6	5	2	12		91			1		1	
SAMOAN		48	1.0	7	1	14	1	2	2	1	3	17					
NEGRO		167	3.5	47	2	13	1	9	7	3	9	1	69	1		5	
PORTUGUESE		79	1.6	10		22	1	19	4	7	1	1		14			
VIETNAMESE		3	.1												3		
OTHER RACES		93	1.9	36	4	24		6	2	3	1					17	
UNKNOWN		1									1						

TABLE 64

DIVORCES AND ANNULMENTS BY LEGAL GROUNDS AND DURATION OF MARRIAGE
STATE OF HAWAII, 1978

LEGAL GROUNDS		TOTAL		DURATION OF MARRIAGE IN YEARS													
		NUMBER	PERCENT	UNDER 1	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & OVER	UNKNOWN
DIVORCES & ANNULMENTS	NUMBER	4,837	100.0	264	496	497	498	449	1476	595	294	196	66			4	2
	PERCENT	100.0		5.5	10.3	10.3	10.3	9.3	30.5	12.3	6.1	4.1	1.4			.1	
ABSOLUTE DIVORCES*		4,827	99.8	261	495	495	497	448	1475	594	294	196	66			4	2
MARR.IRRETR.BROKEN		4,785	98.9	261	495	492	495	443	1467	585	288	189	64			4	2
SEPARATION		26	.5			3	2	4	7	4	3	3					
GRIEV.MENTAL SUFF.		12	.2					1	1	5	2	1	2				
OTHER		4	.1								1	3					
UNKNOWN																	
ANNULMENTS		10	.2	3	1	2	1	1	1	1							
MINOR		2						1	1								
UNDIV.SPOUSE ALIVE		4	.1	1	1	2											
DID NOT COHABIT																	
FAILURE TO PROVIDE																	
PHYS. INCOMPATIBLE																	
FRAUD		2		2													
OTHER		2					1			1							
UNKNOWN																	

* INCLUDES TYPE OF DECREE UNSPECIFIED

TABLE 65

DIVORCES AND ANNULMENTS BY EDUCATION OF HUSBAND AND OF WIFE
STATE OF HAWAII, 1978

EDUCATION OF HUSBAND YEARS OF SCHOOL		TOTAL		EDUCATION OF WIFE - YEARS IN SCHOOL											
					GRADE SCHOOL							COLLEGE			UN-KNOWN
		NUMBER	PERCENT	NONE	1-4	5-6	7-8	9	10	11	12	1-3	4	5+	
TOTAL	NUMBER	4,837	100.0	5	34	83	103	142	211	235	2160	1106	421	248	89
	PERCENT	100.0		.1	.7	1.7	2.1	2.9	4.4	4.9	44.7	22.9	8.7	5.1	1.8
NONE		17	.4	1	1	4	1	1			5		1		3
GRADE SCHOOL: 1 - 4		48	1.0		5	6	6	5	2	3	5	6	1	1	8
5 - 6		60	1.2		4	16	4	2	7	3	14	4			6
7 - 8		92	1.9			3	6	5	9	13	38	9	6	1	2
9		123	2.5		1	3	10	18	8	12	57	7	1	1	5
10		196	4.1			1	10	8	27	22	90	28	5	1	4
11		198	4.1	1	1	3	3	6	12	30	110	21	4	4	3
12		2,108	43.6	2	12	24	45	64	108	107	1255	356	75	31	29
COLLEGE: 1 - 3		1,008	20.8		2	8	8	20	24	28	371	398	94	41	14
4		537	11.1		5	7	5	4	5	6	116	174	156	53	6
5+		336	6.9				1	1	2		55	85	76	115	1
UNKNOWN		114	2.4	1	3	8	4	8	7	11	44	18	2		8

TABLE 66

DIVORCES AND ANNULMENTS BY RESIDENCE OF HUSBAND AND OF WIFE
STATE OF HAWAII, 1978

RESIDENCE OF HUSBAND	RESIDENCE OF WIFE														
		STATE OF HAWAII													NON-RESI-DENT
	TOTAL RECORDED	TOTAL	COUNTY OF HAWAII			COUNTY OF HONOLULU			COUNTY OF KAUAI	COUNTY OF MAUI				UN-KNOWN	
			TOTAL	HILO	BAL.	TOTAL	HON.	BAL.		TOTAL	MAUI	LANAI	MOLOKAI		
TOTAL RECORDED	4,837	4,267	324	154	170	3,455	1,852	1,603	150	320	299	7	14	18	570
STATE OF HAWAII	4,239	3,669	291	144	147	2,947	1,554	1,393	1[illegible]	281	261	7	13	18	570
COUNTY OF HAWAII	324	300	252	124	128	40	17	23	1	5	4	1		2	24
CITY OF HILO	132	127	113	95	18	13	6	7						1	5
BALANCE OF COUNTY	192	173	139	29	110	27	11	16	1	5	4	1		1	19
COUNTY OF HONOLULU	3,398	2,905	30	18	12	2,838	1,496	1,342	6	21	17	1	3	10	493
CITY OF HONOLULU	1,683	1,470	16	9	7	1,436	1,116	320	5	7	6		1	6	213
BALANCE OF COUNTY	1,715	1,435	14	9	5	1,402	380	1,022	1	14	11	1	2	4	280
COUNTY OF KAUAI	158	140	2		2	11	5	6	120	5	5			2	18
COUNTY OF MAUI	325	290	6	2	4	32	19	13	1	247	232	5	10	4	35
ISLAND OF MAUI	297	266	6	2	4	24	15	9	1	231	231			4	31
ISLAND OF LANAI	8	5								5		5			3
ISLAND OF MOLOKAI	20	19				8	4	4		11	1		10		1
UNKNOWN	34	34	1		1	26	17	9	4	3	3				
NONRESIDENT	598	598	33	10	23	508	298	210	18	39	38		1		

TABLE 67

DIVORCES AND ANNULMENTS BY AGE OF HUSBAND AND OF WIFE
STATE OF HAWAII, 1978

AGE OF HUSBAND		ALL AGES		AGE OF WIFE														
		NUMBER	PERCENT	UNDER 18	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75 & OVER	UN-KNOWN
ALL AGES	NUMBER	4,837	100.0	18	97	1062	1325	945	538	324	220	126	68	36	16	6		56
	PERCENT	100.0		.4	2.0	22.0	27.4	19.5	11.1	6.7	4.5	2.6	1.4	.7	.3	.1		1.2
UNDER 18		3	.1		2	1												
18 - 19		25	.5	3	11	9	2											
20 - 24		686	14.2	9	64	497	85	15	5	4	1							6
25 - 29		1,197	24.7	2	11	396	648	101	18	7	3	1			1			9
30 - 34		1,057	21.9	3	7	82	419	449	62	22	1	3						9
35 - 39		675	14.0	1		44	102	251	216	32	13	7	2	1				6
40 - 44		403	8.3			11	35	55	143	112	31	5	5	1				5
45 - 49		289	6.0			7	10	31	45	91	73	20	7	1				4
50 - 54		195	4.0			4	8	17	25	29	59	37	10	3	1			2
55 - 59		115	2.4				2	9	11	8	20	31	18	12	1	1		2
60 - 64		67	1.4				3	2	5	12	7	9	15	9	3			2
65 - 69		50	1.0				3	5	3	5	3	4	8	5	6	3		5
70 - 74		34	.7			1	5	2	3	1	4	5	3	3	3	2		2
75 & OVER		5	.1						1		1				1			2
UNKNOWN		36	.7		2	10	3	8	1	1	4	4		1				2

TABLE 1

MOST COMMON CANCERS REPORTED BY SITE AND RACE
HAWAII TUMOR REGISTRY

MALE RESIDENTS

STATE OF HAWAII, 1977

SITE	Total All Races	RACE					
		Caucasian	Chinese	Filipino	Hawaiian	Japanese	Other
Total All Sites	1,268	431	84	157	150	370	76
Bladder	48	27	4	1	3	8	5
Colon	115	35	11	15	7	42	5
Leukemia	41	12	-	6	12	7	4
Liver	32	1	2	6	6	11	6
Lung	245	93	12	21	46	64	9
Pancreas	34	11	1	5	2	13	2
Prostate	206	73	16	39	12	53	13
Rectum	81	19	5	16	5	32	4
Stomach	95	9	6	8	12	55	5
Other	371	151	27	40	45	85	23

TABLE 2

MOST COMMON CANCERS REPORTED BY SITE AND RACE
HAWAII TUMOR REGISTRY

FEMALE RESIDENTS

STATE OF HAWAII, 1977

SITE	Total All Races	RACE					
		Caucasian	Chinese	Filipina	Hawaiian	Japanese	Other
Total All Sites	1,203	411	81	78	189	352	92
Breast	310	117	27	14	45	89	18
Cervix Uteri Invasive	103	38	3	9	23	12	18
Corpus Uteri	116	36	11	9	17	36	7
Colon	84	30	8	5	7	29	5
Lung	109	37	3	12	21	31	5
Ovary	46	16	2	2	7	15	4
Rectum	53	17	2	1	5	23	5
Stomach	53	7	2	-	8	28	8
Thyroid	49	8	7	4	15	11	4
Other	280	105	16	22	41	78	18

HAWAII HEALTH SURVEILLANCE PROGRAM
1977-78

The Hawaii Health Surveillance Program administers a continuous statewide household survey of health and socio-demographic conditions of the state. The survey is conducted as a means of providing Health Department programs and other state and private agencies with statistics for evaluation of health services, programs, and problems. Furthermore, the survey provides demographic information for observing population changes during the intercensal decade.

The households interviewed in the Health Survey are selected systematically from a target population limited to the non-institutional population. During the 1977-78 period, 12,722 households were selected and 33,760 persons were interviewed. Persons excluded from our sample are those living in military barracks, nursing homes or rest homes, prisons, dormitories, the Island of Niihau, and Kalaupapa Settlement. Because of the exclusion of this group, the health characteristics of the non-institutionalized population can be affected since institutionalization is often contingent upon the health of a person.

The tables which follow are shown in five groups. The first group, Tables 1-14, show the prevalence and number per 1000 persons per year of selected chronic conditions by geographic areas, sex, age, and ethnicity. The geographic areas used for Oahu include census tracts 1-45 for East Honolulu, 46-66 for West Honolulu, 67-95 and 99-100 for Central Oahu, 96-98 for Waianae, and 101-113 for Windward.

The second group of tables, Table 15-17, show the activity limitation status for persons with chronic conditions by age and sex and family income. The limitation of activity question was asked only of persons who reported having at least one chronic condition in the 12 months prior to the month of interview. These people were asked to rate themselves in terms of their health according to a scale of 1 to 4. The scale was represented as follows: 1=Not Able To Work At All; 2=Able To Work But Limited In Type Or Amount Of Work; 3=Able To Work But Limited In Type Or Amount Of Other Activity; 4= Not Limited In Anyway.

The incidence and number per 100 persons per year of acute conditions is exhibited in Table 18-27, by geographic areas, sex, age, and ethnicity. Since the frequency of acute conditions are recorded on a monthly basis, the acute conditions were multiplied by twelve (12) in order that a yearly morbidity rate could be calculated.

Tables 28-34 depict the different types of disability days for persons who have acute and/or chronic conditions by geographic areas and age. Restricted activity day is a day during which a person had to cut down on his usual activity for all or most of the day. A bed day is defined as a day during which a person reported staying in bed for all or most of a day. The work day lost or school day lost is a day during which a person is normally at work or school, but due to an illness or injury, could not work or go to school for all or most of the day. Total restricted activity days include bed days, work days, and school days lost. The number of restricted activity days, bed days, and work days lost per 1000 persons are also illustrated in figures 1-3, by geographic areas. These illustrations were provided to us by the Hawaii Cooperative Health Statistics System at the University of Hawaii.

The fifth section, Tables 35-38, is from a special supplement to the Health Survey which was administered from July 1978 to March 1979 on 3,630 families statewide. Questions were asked on the type of health insurance coverage the family had; cost to the family, after insurance payments, for various types of expenses; and the percentage of medical care cost paid by insurance for the above services.

TABLE 1

PREVALENCE OF SELECTED CHRONIC CONDITIONS
BY GEOGRAPHIC AREA, 1977-78.

Selected chronic condition	State	Oahu	East Hon.	West Hon.	Central Oahu	Waianae	Wind-ward	Kauai	Maui County	Hawaii
Heart condition	16,866	12,202	5,448	1,645	2,861	433	1,816	1,113	1,827	1,724
Impairments of back or spine	28,295	21,234	7,774	2,018	7,300	365	3,776	1,291	1,970	3,801
Hypertension without heart involvement	54,794	40,503	16,881	5,853	10,020	1,452	6,296	2,762	5,318	6,211
Arthritis/ rheumatism	21,151	15,938	7,918	1,560	3,434	504	2,522	945	1,692	2,576
Hearing impairment	20,205	15,260	6,134	1,746	4,733	142	2,506	963	1,441	2,541
Asthma, with or without hayfever	31,034	24,956	7,770	2,736	8,625	1,324	4,502	1,551	1,629	2,896
Diabetes	19,302	14,277	5,806	2,252	4,241	512	1,466	1,028	1,973	2,024
Mental and nervous condition	14,757	11,998	4,575	1,482	3,044	290	2,608	1,072	611	1,076
Visual impairment	9,005	6,269	2,715	723	1,502	99	1,230	474	885	1,377
Malignant neoplasms	4,983	4,155	1,938	212	924	192	890	208	200	420
Chronic and allergic skin conditions	20,788	16,136	6,348	1,292	5,267	242	2,986	1,118	1,375	2,158
Chronic sinusitis	20,363	16,896	4,818	1,414	7,135	271	3,258	733	984	1,749
Hayfever without asthma	43,441	35,751	13,959	2,297	11,399	523	7,573	1,706	2,407	3,576
Stomach ulcer	7,974	6,259	2,428	933	2,004	115	780	366	522	826
Bronchitis/ emphysema	9,114	7,094	2,940	704	2,072	199	1,178	238	705	1,077
Benign and unspecified neoplasms	6,074	4,753	1,872	213	1,374	89	1,205	318	403	600
Hemorrhoids	12,507	10,026	3,827	714	3,479	25	1,980	700	650	1,130
Thyroid/ goiter	4,783	3,936	1,642	217	1,242	116	718	165	445	237
Varicose veins	4,854	3,816	1,064	379	1,654	49	670	205	472	361
Gout	8,955	7,313	2,974	751	2,044	223	1,321	692	857	1,092

TABLE 2

NUMBER OF SELECTED CHRONIC CONDITIONS
PER 1,000 PERSONS BY GEOGRAPHIC AREA, 1977-78.

Selected chronic condition	State	Oahu	East Hon.	West Hon.	Central Oahu	Waia-nae	Wind-ward	Kauai	Maui County	Hawaii
Heart condition	19.6	17.8	23.2	21.7	12.1	15.6	16.2	32.7	30.1	21.5
Impairments of back or spine	32.8	30.9	33.2	26.6	30.8	13.2	33.6	37.9	32.4	47.5
Hypertension without heart involvement	63.6	58.9	72.0	77.2	42.3	52.5	56.1	81.2	87.6	77.6
Arthritis/ rheumatism	24.5	23.2	33.8	20.6	14.5	18.2	22.5	27.8	27.8	32.2
Hearing impairment	23.4	22.2	26.2	23.0	20.0	5.1	22.3	28.3	23.7	31.8
Asthma, with or without hayfever	36.0	36.3	33.1	36.1	36.4	47.9	40.1	45.6	26.8	36.2
Diabetes	22.4	20.8	24.8	29.7	17.9	18.5	13.1	30.2	32.5	25.3
Mental and nervous condition	17.1	17.5	19.5	19.5	12.8	10.5	23.3	31.5	10.1	13.4
Visual impairment	10.4	9.1	11.6	9.5	6.3	3.6	11.0	13.9	14.6	17.2
Malignant neoplasms	5.8	6.0	8.3	2.8	3.9	6.9	7.9	6.1	3.3	5.2
Chronic and allergic skin conditions	24.1	23.5	27.1	17.0	22.2	8.7	26.6	32.9	22.6	27.0
Chronic sinusitis	23.6	24.6	20.6	18.6	30.1	9.8	29.0	21.6	16.2	21.8
Hayfever without asthma	50.4	52.0	59.5	30.3	48.1	18.9	67.5	50.1	39.6	44.7
Stomach ulcer	9.2	9.1	10.4	12.3	8.4	4.2	6.9	10.8	8.6	10.3
Bronchitis/ emphysema	10.6	10.3	12.5	9.3	8.7	7.2	10.[illegible]	7.0	11.6	13.4
Benign and unspecified neoplasms	7.0	6.9	8.0	2.8	5.8	3.2	10.7	9.3	6.6	7.5
Hemorrhoids	14.5	14.6	16.3	9.4	14.7	0.9	17.6	20.6	10.7	14.1
Thyroid/ goiter	5.6	5.7	7.0	2.9	5.2	4.2	6.4	4.8	7.3	3.0
Varicose veins	5.6	5.6	4.5	5.0	7.0	1.8	6.0	6.0	7.8	4.5
Gout	11.6	10.6	12.7	9.9	8.6	8.1	11.8	20.4	14.1	13.6

TABLE 3

PREVALENCE OF SELECTED CHRONIC CONDITIONS FOR MALES BY GEOGRAPHIC AREAS, 1977-78.

Selected chronic conditions	State	Oahu	East Hon.	West Hon.	Central Oahu	Waianae	Wind-ward	Kauai	Maui County	Hawaii
Heart condition	9,036	6,525	2,922	896	1,499	176	1,033	637	977	897
Impairments of back or spine	16,084	11,761	4,598	1,106	3,752	245	2,059	803	1,208	2,312
Hypertension without heart involvement	26,849	19,670	8,033	2,628	4,842	572	3,595	1,299	2,612	3,268
Arthritis/ rheumatism	7,146	5,264	2,806	437	1,090	142	788	338	606	939
Hearing impairment	13,589	10,097	3,897	1,173	3,155	142	1,730	684	1,155	1,652
Asthma, with or without hayfever	15,976	12,687	4,048	1,354	4,506	607	2,172	861	857	1,571
Diabetes	9,198	6,705	2,839	1,092	1,829	137	809	507	1,010	977
Mental and nervous condition	5,963	4,840	1,866	640	1,122	102	1,110	492	285	345
Visual impairment	4,756	3,227	1,288	430	719	50	740	194	565	770
Malignant neoplasms	2,453	2,034	966	93	356	145	474	108	39	272
Chronic and allergic skin conditions	9,150	7,111	2,909	597	2,236	126	1,243	476	639	925
Chronic sinusitis	9,156	7,666	2,250	667	3,243	124	1,383	396	430	664
Hayfever without asthma	18,285	15,121	5,866	957	5,104	127	3,067	732	908	1,524
Stomach ulcer	4,914	3,858	1,600	501	1,195	71	491	258	407	391
Bronchitis/ emphysema	4,442	3,401	1,312	335	1,042	126	586	114	355	571
Benign and unspecified neoplasms	1,562	1,217	592	---	298	---	328	94	97	153
Hemorrhoids	5,770	4,616	1,857	312	1,505	25	917	284	374	497
Thyroid/ goiter	626	395	157	110	127	---	---	63	155	14
Varicose veins	1,091	823	280	96	288	21	138	35	136	97
Gout	7,567	5,460	2,314	392	1,650	111	993	611	637	859

TABLE 4

NUMBER OF SELECTED CHRONIC CONDITIONS PER 1,000 MALES PER YEAR BY GEOGRAPHIC AREA, 1977-78.

Selected chronic conditions	State	Oahu	East Hon.	West Hon.	Central Oahu	Waianae	Wind-ward	Kauai	Maui County	Hawaii
Heart condition	20.8	18.9	25.1	23.6	12.4	12.5	18.5	36.0	31.9	21.7
Impairments of back or spine	37.0	34.1	39.5	29.1	31.1	17.4	37.0	45.4	39.5	56.0
Hypertension without heart involvement	61.8	57.0	69.0	69.2	40.1	40.6	64.5	73.4	85.4	79.2
Arthritis/ rheumatism	16.4	15.3	24.1	11.5	9.0	10.1	14.1	19.1	19.8	22.8
Hearing impairment	31.3	29.3	33.5	30.9	26.2	10.1	31.1	38.6	37.8	40.0
Asthma, with or without hayfever	36.8	36.8	34.8	35.7	37.4	43.1	39.0	48.6	28.0	38.0
Diabetes	21.2	19.4	24.4	28.8	15.2	9.7	14.5	28.6	33.0	23.7
Mental and nervous condition	13.7	14.0	16.0	16.8	9.3	7.3	19.9	27.8	9.3	8.4
Visual impairment	11.0	9.4	11.1	11.3	6.0	3.6	13.3	11.0	18.5	18.6
Malignant neoplasms	5.6	5.9	8.3	2.4	3.0	10.3	8.5	6.1	1.3	6.6
Chronic and allergic skin conditions	21.1	20.6	25.0	15.7	18.5	9.0	22.3	26.9	20.9	22.4
Chronic sinusitis	21.1	22.2	19.3	17.6	26.9	8.8	24.8	22.4	14.1	16.1
Hayfever without asthma	42.1	43.9	50.4	25.2	42.3	9.0	55.0	41.3	29.7	36.9
Stomach ulcer	11.3	11.2	13.8	13.2	9.9	5.1	8.8	14.6	13.3	9.5
Bronchitis/ emphysema	10.2	9.9	11.3	8.8	8.6	9.0	10.5	6.4	11.6	13.8
Benign and unspecified neoplasms	3.6	3.5	5.1	---	2.5	---	5.9	5.3	3.2	3.7
Hemorrhoids	13.3	13.4	16.0	8.2	12.5	1.8	16.5	16.0	12.2	12.0
Thyroid/ goiter	1.4	1.1	1.3	2.9	1.0	---	---	3.5	5.1	0.3
Varicose veins	2.5	2.4	2.4	2.5	2.4	1.5	2.5	2.0	4.4	2.4
Gout	17.4	15.8	19.9	10.3	13.7	7.9	17.8	34.5	20.8	20.8

TABLE 5

PREVALENCE OF SELECTED CHRONIC CONDITIONS
FOR FEMALES BY GEOGRAPHIC AREAS, 1977-78.

Selected chronic conditions	State	Oahu	East Hon.	West Hon.	Central Oahu	Waianae	Wind-ward	Kauai	Maui County	Hawaii
Heart condition	7,831	5,676	2,526	749	1,362	257	782	476	851	827
Impairments of back or spine	12,211	9,473	3,176	912	3,548	120	1,717	487	762	1,489
Hypertension without heart involvement	27,945	20,833	8,848	3,225	5,179	881	2,701	1,463	2,706	2,943
Arthritis/ rheumatism	14,005	10,675	5,112	1,123	2,343	362	1,734	608	1,086	1,637
Hearing impairment	6,617	5,163	2,237	573	1,578	---	775	279	286	889
Asthma, with or without hayfever	15,058	12,270	3,721	1,383	4,119	717	2,331	690	772	1,326
Diabetes	10,104	7,572	2,967	1,160	2,412	375	657	522	963	1,047
Mental and nervous condition	8,795	7,156	2,709	842	1,921	187	1,498	580	326	731
Visual impairment	4,249	3,042	1,427	292	783	49	490	280	320	607
Malignant neoplasms	2,530	2,122	972	119	567	48	416	100	160	148
Chronic and allergic skin conditions	11,637	9,025	3,439	696	3,031	116	1,743	642	736	1,234
Chronic sinusitis	11,207	9,231	2,568	747	3,892	148	1,876	338	554	1,085
Hayfever without asthma	25,156	20,630	8,092	1,339	6,295	397	4,506	974	1,500	2,052
Stomach ulcer	3,060	2,401	827	432	809	44	290	108	115	436
Bronchitis/ emphysema	4,672	3,693	1,629	370	1,030	72	592	124	350	506
Benign and unspecified neoplasms	4,513	3,536	1,280	213	1,077	89	877	223	306	447
Hemorrhoids	6,737	5,410	1,970	402	1,974	---	1,063	417	277	633
Thyroid/ goiter	4,157	3,541	1,486	107	1,115	116	718	102	290	223
Varicose veins	3,763	2.993	784	283	1,366	28	532	170	337	264
Gout	2,388	1,853	660	358	394	112	328	81	220	233

TABLE 6

NUMBER OF SELECTED CHRONIC CONDITIONS PER 1,000 FEMALES PER YEAR
BY GEOGRAPHIC AREAS, 1977-78.

Selected chronic conditions	State	Oahu	East Hon.	West Hon.	Central Oahu	Waianae	Wind-ward	Kauai	Maui County	Hawaii
Heart condition	18.3	16.6	21.4	19.8	11.7	18.9	13.8	29.2	28.2	21.3
Impairments of back or spine	28.6	27.7	26.9	24.1	30.5	8.8	30.4	29.8	25.3	38.4
Hypertension without heart involvement	65.3	60.8	74.9	85.1	44.5	64.8	47.8	89.6	69.8	75.9
Arthritis/ rheumatism	32.7	31.2	43.3	29.6	20.1	26.7	30.6	37.2	36.0	42.2
Hearing impairment	15.5	15.1	19.0	15.1	13.6	---	13.7	17.1	9.5	22.9
Asthma, with or without hayfever	35.2	35.8	31.5	36.5	35.4	52.8	41.2	42.3	25.6	34.2
Diabetes	23.6	22.1	25.1	30.6	20.7	27.6	11.6	32.0	31.9	27.0
Mental and nervous condition	20.6	20.9	22.9	22.2	16.5	13.8	26.5	35.5	10.8	18.9
Visual impairment	9.9	8.9	12.1	7.7	6.7	3.6	8.7	17.1	10.6	15.6
Malignant neoplasms	5.9	6.2	8.2	3.1	4.9	3.5	7.3	6.1	5.3	3.8
Chronic and allergic skin conditions	27.2	26.4	29.1	18.4	26.0	8.5	30.8	39.4	24.4	31.8
Chronic sinusitis	26.2	27.0	21.8	19.7	33.4	10.9	33.2	20.7	18.4	28.0
Hayfever without asthma	58.8	60.2	68.5	35.4	54.1	29.2	79.7	59.7	49.8	52.9
Stomach ulcer	7.2	7.0	7.0	11.4	7.0	3.2	5.1	6.6	3.8	11.2
Bronchitis/ emphysema	10.9	10.8	13.8	9.8	8.8	5.3	10.5	7.6	11.6	13.0
Benign and unspecified neoplasms	10.6	10.3	10.8	5.6	9.2	6.5	15.5	13.7	10.2	11.5
Hemorrhoids	15.8	15.8	16.7	10.6	17.0	---	18.8	25.5	9.2	16.3
Thyroid/ goiter	9.7	10.3	12.6	2.8	9.6	8.5	12.7	6.3	9.6	5.8
Varicose veins	8.8	8.7	6.6	7.5	11.7	2.1	9.4	10.4	11.2	6.8
Gout	5.6	5.4	5.6	9.4	3.4	8.3	5.8	5.0	7.3	6.0

TABLE 7

PREVALENCE OF SELECTED CHRONIC CONDITIONS BY AGE, 1977-78.

Selected chronic conditions	All Ages	Under 17 Years	17-44 Years	45-64 Years	65 Years and Over
Heart condition	16,866	992	1,900	7,301	6,673
Impairments of back or spine	28,295	718	15,002	9,878	2,698
Hypertension without heart involvement	54,794	151	12,080	28,766	13,797
Arthritis/ rheumatism	21,151	176	3,232	10,054	7,689
Hearing impairment	20,205	1,857	5,176	6,969	6,204
Asthma, with or without hayfever	31,034	13,432	12,103	3,840	1,658
Diabetes	19,302	330	3,214	9,166	6,592
Mental and nervous condition	14,757	1,019	7,138	4,731	1,868
Visual impairment	9,005	658	2,066	2,514	3,769
Malignant neoplasms	4,983	104	1,100	2,603	1,177
Chronic and allergic skin conditions	20,788	5,748	9,924	3,792	1,324
Chronic sinusitis	20,363	1,762	13,389	4,222	990
Hayfever without asthma	43,441	10,932	24,176	7,093	1,240
Stomach ulcer	7,974	215	3,618	2,970	1,170
Bronchitis/ emphysema	9,114	2,263	3,1[illegible]	2,376	1,351
Benign and unspecified neoplasms	6,074	255	3,073	1,729	1,017
Hemorrhoids	12,507	62	7,506	4,103	836
Thyroid/ goiter	4,783	204	2,007	2,038	534
Varicose veins	4,854	---	2,068	2,179	608
Gout	9,955	27	2,092	5,165	2,671

TABLE 8

NUMBER OF CHRONIC CONDITIONS PER 1,000 PERSONS PER YEAR BY AGE, 1977-78.

Selected chronic condition	All Ages	Under 17 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
Heart condition	19.6	3.7	5.2	42.6	117.5
Impairments of back or spine	32.8	2.7	40.9	57.6	47.5
Hypertension without heart involvement	63.6	0.6	32.9	167.8	242.9
Arthritis/ rheumatism	24.5	0.7	8.8	58.6	135.4
Hearing impairment	23.4	7.0	14.1	40.6	109.2
Asthma, with or without hayfever	36.0	50.3	33.0	22.4	29.2
Diabetes	22.4	1.2	8.8	53.5	116.0
Mental and nervous condition	17.1	3.8	19.5	27.6	32.9
Visual impairment	10.4	2.5	5.6	14.7	66.4
Malignant neoplasms	5.8	0.4	3.0	15.2	20.7
Chronic and allergic skin condition	24.1	21.5	27.0	22.1	23.3
Chronic sinusitis	23.6	6.6	36.5	24.6	17.4
Hayfever without asthma	50.4	41.0	65.9	41.4	21.8
Stomach ulcer	9.2	0.8	9.9	17.3	20.6
Bronchitis/ emphysema	10.6	8.5	8.5	13.9	23.8
Benign and unspecified neoplasms	7.0	1.0	8.4	10.1	17.9
Hemorrhoids	14.5	0.2	20.5	23.9	14.7
Thyroid/ goiter	5.5	0.8	5.5	11.9	9.4
Varicose veins	5.6	---	5.6	12.7	10.7
Gout	11.5	0.1	5.7	30.1	47.0

TABLE 9

PREVALENCE OF SELECTED CHRONIC CONDITIONS FOR MALES BY AGE, 1977-78.

Selected chronic conditions	All Ages	Under 17 Years	17-44 Years	45-64 Years	65 Years and Over
Heart condition	9,036	301	946	4,408	3,380
Impairments of back or spine	16,084	332	8,058	6,264	1,430
Hypertension without heart involvement	26,849	45	6,424	14,239	6,141
Arthritis/ rheumatism	7,146	---	1,055	3,543	2,548
Hearing impairment	13,589	1,114	3,799	5,166	3,510
Asthma, with or without hayfever	15,976	8,563	5,239	1,368	805
Diabetes	9,198	128	1,421	4,515	3,135
Mental and nervous condition	5,963	718	2,588	1,906	751
Visual impairment	4,756	404	1,058	1,531	1,763
Malignant neoplasms	2,453	77	524	1,114	738
Chronic and allergic skin conditions	9,150	2,966	3,806	1,900	478
Chronic sinusitis	9,156	1,016	5,916	1,705	518
Hayfever without asthma	18,285	5,441	9,692	2,732	420
Stomach ulcer	4,914	75	1,963	2,088	788
Bronchitis/ emphysema	4,442	1,437	1,094	1,098	813
Benign and unspecified neoplasms	1,562	137	490	505	430
Hemorrhoids	5,770	62	2,957	2,328	423
Thyroid/ goiter	626	70	147	360	50
Varicose veins	1,091	---	286	482	322
Gout	7,567	---	1,726	3,939	1,902

TABLE 10

NUMBER OF CHRONIC CONDITIONS PER 1,000 MALES PER YEAR BY AGE, 1977-78.

Selected chronic condition	All Ages	Under 17 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
Heart condition	20.8	2.2	5.2	50.1	116.4
Impairments of back or spine	37.0	2.4	44.7	71.2	49.2
Hypertension without heart involvement	61.8	0.3	35.7	161.7	211.5
Arthritis/ rheumatism	16.4	---	5.9	40.2	87.7
Hearing impairment	31.3	8.1	21.1	58.7	120.9
Asthma, with or without hayfever	36.8	62.4	29.1	15.5	27.7
Diabetes	21.2	0.9	7.9	51.3	108.0
Mental and nervous condition	13.7	5.2	14.4	21.6	25.8
Visual impairment	11.0	2.9	5.9	17.4	60.7
Malignant neoplasms	5.6	0.6	2.9	12.6	25.4
Chronic and allergic skin condition	21.1	21.6	21.1	21.6	16.5
Chronic sinusitis	21.1	7.4	32.9	19.4	17.8
Hayfever without asthma	42.1	39.7	53.8	31.0	14.4
Stomach ulcer	11.3	0.5	10.9	23.7	27.1
Bronchitis/ emphysema	10.2	10.5	6.1	12.5	28.0
Benign and unspecified neoplasms	3.6	1.0	2.7	5.7	14.8
Hemorrhoids	13.3	0.4	16.4	26.4	14.6
Thyroid/ goiter	1.4	0.5	0.8	4.1	1.7
Varicose veins	2.5	---	1.6	5.5	11.1
Gout	17.4	---	9.6	44.7	65.5

TABLE 11

PREVALENCE OF SELECTED CHRONIC CONDITIONS FOR FEMALES BY AGE, 1977-78.

Selected chronic condition	All Ages	Under 17 Years	17-44 Years	45-64 Years	65 Years and Over
Heart condition	7,831	691	954	2,893	3,294
Impairments of back or spine	12,211	385	6,944	3,614	1,268
Hypertension without heart involvement	27,945	107	5,656	14,527	7,656
Arthritis/ rheumatism	14,005	176	2,176	6,511	5,141
Hearing impairment	6,617	743	1,377	1,803	2,694
Asthma, with or without hayfever	15,058	4,869	6,864	2,472	853
Diabetes	10,104	202	1,793	4,651	3,457
Mental and nervous condition	8,795	301	4,551	2,825	1,118
Visual impairment	4,249	254	1,006	983	2,006
Malignant neoplasms	2,530	27	576	1,489	439
Chronic and allergic skin conditions	11,637	2,782	6,118	1,891	846
Chronic sinusitis	11,207	746	7,473	2,516	472
Hayfever without asthma	25,156	5,490	14,484	4,360	821
Stomach ulcer	3,060	140	1,655	882	382
Bronchitis/ emphysema	4,672	827	2,028	1,279	538
Benign and unspecified neoplasms	4,513	118	2,583	1,224	588
Hemorrhoids	6,737	---	4,549	1,775	413
Thyroid/ goiter	4,157	134	1,860	1,678	485
Varicose veins	3,763	---	1,781	1,696	286
Gout	2,388	27	366	1,226	769

TABLE 12

NUMBER OF CHRONIC CONDITIONS PER 1,000 FEMALES PER YEAR BY AGE, 1977-78.

Selected chronic conditions	All Ages	Under 17 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
Heart condition	18.3	5.3	5.1	34.7	118.6
Impairments of back or spine	28.6	3.0	37.2	43.3	45.7
Hypertension without heart involvement	65.3	0.8	30.3	174.2	275.7
Arthritis/ rheumatism	32.7	1.4	11.6	78.1	185.2
Hearing impairment	15.5	5.7	7.4	21.6	97.0
Asthma, with or without hayfever	35.2	37.5	36.8	29.6	30.7
Diabetes	23.6	1.6	9.6	55.8	124.5
Mental and nervous condition	20.6	2.3	24.4	33.9	40.2
Visual impairment	9.9	2.0	5.4	11.8	72.3
Malignant neoplasms	5.9	0.2	3.1	17.8	15.8
Chronic and allergic skin conditions	27.2	21.4	32.8	22.7	30.5
Chronic sinusitis	26.2	5.8	40.0	30.2	17.0
Hayfever without asthma	58.8	42.3	77.6	52.3	29.6
Stomach ulcer	7.2	1.1	8.9	10.6	13.8
Bronchitis/ emphysema	10.9	6.4	10.9	15.3	19.4
Benign and unspecified neoplasms	10.6	0.9	13.8	14.7	21.2
Hemorrhoids	15.8	---	24.4	21.3	14.9
Thyroid/ goiter	9.7	1.0	10.0	20.1	17.4
Varicose veins	8.8	---	9.5	20.3	10.3
Gout	5.6	0.2	2.0	14.7	27.7

TABLE 13

NUMBER OF SELECTED CHRONIC CONDITIONS PER 1,000 PERSONS PER YEAR BY ETHNICITY, 1977-78

Selected chronic condition	Caucasian	Japanese	Hawaiian, Pt. Hawaiian	Filipino	Chinese	Other and Unknown
Heart condition	23.2	21.3	18.2	15.8	25.2	12.5
Impairments of back or spine	41.2	35.1	28.7	23.1	31.8	26.0
Hypertension without heart involvement	48.3	98.7	54.2	67.0	85.0	33.4
Arthritis/ rheumatism	36.3	25.2	15.8	17.2	40.0	13.4
Hearing impairment	31.1	24.9	19.3	17.6	37.5	12.1
Asthma, with or without hayfever	30.2	21.1	59.5	31.9	36.0	45.4
Diabetes	13.1	36.8	21.2	24.0	32.7	11.8
Mental and nervous condition	27.7	13.6	11.1	13.0	16.3	14.7
Visual impairment	12.6	10.0	10.6	8.5	8.9	8.8
Malignant neoplasms	9.6	4.9	8.8	3.5	8.7	3.5
Chronic & allergic skin conditions	28.4	23.5	22.7	17.4	27.8	22.7
Chronic sinusitis	45.8	16.8	12.7	13.2	12.6	19.7
Hayfever without asthma	68.4	55.0	34.6	21.6	54.2	48.3
Stomac ulcer	8.7	11.2	8.8	10.1	7.8	7.3
Bronchitis/ emphysema	16.2	6.8	14.6	5.0	3.8	7.8
Benign and unspecified neoplasms	9.6	6.7	4.5	5.4	10.0	6.4
Hemorrhoids	22.7	15.4	7.8	6.5	20.7	10.3
Thyroid/goiter	8.1	6.1	4.0	3.3	4.8	3.7
Varicose Veins	8.2	5.6	3.3	5.6	3.0	4.8
Gout	8.4	12.7	11.5	20.6	21.2	6.0

TABLE 14

PREVALENCE OF SELECTED CHRONIC CONDITIONS BY ETHNICITY 1977-78

Selected chronic condition	Caucasian	Japanese	Hawaiian, Pt. Hawaiian	Filipino	Chinese	Other and Unknown
Heart condition	5,336	4,665	2,912	1,388	975	1,591
Impairments of back or spine	9,463	7,693	4,574	2,033	1,230	3,301
Hypertension without heart involvement	11,088	21,623	8,654	5,892	3,286	4,252
Arthritis/ rheumatism	8,348	5,525	2,516	1,515	1,546	1,701
Hearing impairment	7,140	5,449	3,078	1,552	1,448	1,540
Asthma, with or without hayfever	6,949	4,618	9,490	2,807	1,391	5,778
Diabetes	3,002	8,060	3,378	2,105	1,264	1,494
Mental and nervous condition	6,358	2,988	1,765	1,142	631	1,873
Visual impairment	2,900	2,203	1,696	745	344	1,116
Malignant neoplasms	2,201	1,084	610	308	338	442
Chronic & allergic skin conditions	6,527	5,148	3,616	1,531	1,075	2,891
Chronic sinusitis	10,520	3,672	2,022	1,157	488	2,503
Hayfever without asthma	15,725	12,046	5,528	1,901	2,096	6,144
Stomach ulcer	1,993	2,463	1,399	888	301	929
Bronchitis/ emphysema	3,710	1,482	2,336	443	149	993
Benign and unspecified neoplasms	2,209	1,465	720	477	385	818
Hemorrhoids	5,206	3,371	1,251	572	800	1,306
Thyroid/goiter	1,856	1,334	638	293	186	476
Varicose veins	1,887	1,223	534	491	115	604
Gout	1,941	2,786	1,840	1,809	820	759

TABLE 15. DISTRIBUTION OF PERSONS BY ACTIVITY LIMITATION STATUS DUE TO CHRONIC CONDITIONS ACCORDING TO SEX AND AGE, 1977-78.

BOTH SEXES	Total Population	No Limitation Of Activity	Limited, But Not In Major Activity	Limited in Amount or Kind of Activity	Unable to Carry on Major Activity
All ages	303,497	256,109	19,532	17,614	10,241
Under 17 years	46,506	42,462	2,594	1,252	197
17 - 44 years	124,384	111,523	6,360	4,911	1,590
45 - 64 years	91,856	74,725	6,272	6,437	4,423
65 years and over	40,750	27,398	4,306	5,015	4,031
MALE					
All ages	152,542	128,062	9,127	9,212	6,142
Under 17 years	25,731	23,630	1,336	675	90
17 - 44 years	59,268	53,008	2,748	2,432	1,079
45 - 64 years	47,489	38,109	2,738	3,705	2,937
65 years and over	20,055	13,315	2,305	2,400	2,036
FEMALE					
All ages	150,954	128,047	10,405	8,403	4,099
Under 17 years	20,775	18,832	1,258	578	107
17 - 44 years	65,116	58,515	3,612	2,479	511
45 - 64 years	44,368	36,617	3,534	2,732	1,485
65 years and over	20,695	14,084	2,001	2,615	1,995
	PERCENT DISTRIBUTION				
BOTH SEXES					
All ages	100.0	84.4	6.4	5.8	3.4
Under 17 years	100.0	91.3	5.6	2.7	0.4
17 - 44 years	100.0	89.7	5.1	3.9	1.3
45 - 64 years	100.0	81.4	6.8	7.0	4.8
65 years and over	100.0	67.2	10.6	12.3	9.9
MALE					
All ages	100.0	84.0	6.0	6.0	4.0
Under 17 years	100.0	91.8	5.2	2.6	0.4
17 - 44 years	100.0	89.5	4.6	4.1	1.8
45 - 64 years	100.0	80.2	5.8	7.8	6.2
65 years and over	100.0	66.4	11.5	12.0	10.1
FEMALE					
All ages	100.0	84.8	6.9	5.6	2.7
Under 17 years	100.0	90.6	6.1	2.8	0.5
17 - 44 years	100.0	89.9	5.5	3.8	0.8
45 - 64 years	100.0	82.5	8.0	6.2	3.3
65 years and over	100.0	68.1	9.7	12.6	9.6

TABLE 16. DISTRIBUTION OF PERSONS BY ACTIVITY LIMITATION STATUS DUE TO CHRONIC CONDITIONS ACCORDING TO FAMILY INCOME AND AGE, 1977-78.

ALL INCOMES*	Total Population	No Limitation Of Activity	Limited, But Not in Major Activity	Limited in Amount or Kind of Activity	Unable to Carry on Major Activity
All ages	303,497	256,109	19,532	17,614	10,241
Under 17 years	46,506	42,462	2,594	1,252	197
17 - 44 years	124,384	111,523	6,360	4,911	1,590
45 - 64 years	91,856	74,725	6,272	6,437	4,423
65 years and over	40,750	27,398	4,306	5,015	4,031
UNDER $5,000					
All ages	19,939	13,759	1,820	2,307	2,054
Under 17 years	2,113	1,706	201	126	---
17 - 44 years	7,005	5,712	558	493	242
45 - 64 years	4,262	2,386	398	603	875
65 years and over	6,560	3,875	662	1,085	937
$5,000 - $9,999					
All ages	53,476	43,425	3,624	3,983	2,444
Under 17 years	8,418	7,541	512	338	27
17 - 44 years	24,721	21,040	1,510	1,515	656
45 - 64 years	11,182	8,172	966	1,028	1,017
65 years and over	9,156	6,673	636	1,103	744
$10,000 - $14,999					
All ages	47,240	39,899	2,948	3,049	1,344
Under 17 years	7,050	6,374	331	328	18
17 - 44 years	21,852	19,858	1,015	809	170
45 - 64 years	12,623	9,901	814	1,264	644
65 years and over	5,715	3,767	788	649	512
$15,000 - $19,999					
All ages	43,569	38,575	2,157	1,980	857
Under 17 years	7,441	6,823	414	149	55
17 - 44 years	18,883	17,319	730	651	184
45 - 64 years	13,487	11,723	659	762	343
65 years and over	3,758	2,710	354	418	275
$20,000 - $24,999					
All ages	37,322	32,803	2,215	1,539	765
Under 17 years	5,975	5,499	379	98	---
17 - 44 years	15,343	14,163	802	317	61
45 - 64 years	13,132	11,074	870	789	400
65 years and over	2,871	2,068	164	336	304
$25,000 and over					
All ages	63,112	56,385	3,451	2,131	1,144
Under 17 years	10,548	10,083	406	59	---
17 - 44 years	23,069	21,456	1,006	462	145
45 - 64 years	24,295	21,419	1,431	1,049	396
65 years and over	5,199	3,427	608	561	603

*includes unknown income

TABLE 17. PERCENT DISTRIBUTION OF PERSONS BY ACTIVITY LIMITATION STATUS DUE TO CHRONIC CONDITIONS ACCORDING TO FAMILY INCOME AND AGE, 1977-78.

ALL INCOMES*	Total Population	No Limitation of Activity	Limited, but not in Major Activity	Limited in Amount & Type of Major Activity	Unable to Carry on Major Activity
All ages	100.0	84.4	6.4	5.8	3.4
Under 17 years	100.0	91.3	5.6	2.7	0.4
17 - 44 years	100.0	89.7	5.1	3.9	1.3
45 - 64 years	100.0	81.4	6.8	7.0	4.8
65 years and over	100.0	67.2	10.6	12.3	9.9
UNDER $5,000					
All ages	100.0	69.0	9.1	11.6	10.3
Under 17 years	100.0	84.5	9.5	6.0	---
17 - 44 years	100.0	81.5	8.0	7.0	3.5
45 - 64 years	100.0	56.0	9.3	14.2	20.5
65 years and over	100.0	59.1	10.1	16.5	14.3
$5,000 - $9,999					
All ages	100.0	81.2	6.8	7.4	4.6
Under 17 years	100.0	89.6	6.1	4.0	0.3
17 - 44 years	100.0	85.1	6.1	6.1	2.7
45 - 64 years	100.0	73.1	8.6	9.2	9.1
65 years and over	100.0	72.9	6.9	12.1	8.1
$10,000 - $14,999					
All ages	100.0	84.5	6.2	6.5	2.8
Under 17 years	100.0	90.4	4.7	4.6	0.3
17 - 44 years	100.0	90.9	4.6	3.7	0.8
45 - 64 years	100.0	78.4	6.5	10.0	5.1
65 years and over	100.0	65.9	13.8	11.3	9.0
$15,000 - $19,999					
All ages	100.0	88.5	5.0	4.5	2.0
Under 17 years	100.0	91.7	5.6	2.0	0.7
17 - 44 years	100.0	91.7	3.9	3.4	1.0
45 - 64 years	100.0	86.9	4.9	5.7	2.5
65 years and over	100.0	72.1	9.5	11.1	7.3
$20,000 - $24,999					
All ages	100.0	87.9	5.9	4.1	2.1
Under 17 years	100.0	92.0	6.3	1.7	---
17 - 44 years	100.0	92.3	5.2	2.1	0.4
45 - 64 years	100.0	84.3	6.6	6.0	3.1
65 years and over	100.0	72.0	5.7	11.7	10.6
$25,000 and over					
All ages	100.0	89.3	5.5	3.4	1.8
Under 17 years	100.0	95.6	3.8	0.6	---
17 - 44 years	100.0	93.0	4.4	2.0	0.6
45 - 64 years	100.0	88.2	5.9	4.3	1.6
65 years and over	100.0	65.9	11.7	10.8	11.6

*includes unknown income

Table 18
Incidence of Acute Conditions Per Year by Geographic Areas, 1977-78.

	Average Number of Persons in Thousands									
	State	Oahu	East Hon.	West Hon.	Cent. Oahu	Waia-nae	Wind-ward	Kauai	Maui County	Hawaii
All acute conditions	1,462	1,126	326	88	478	44	188	51	104	180
Infective parasitic diseases	111	90	23	4	38	3	20	2	9	8
Respiratory condition	965	734	208	58	324	33	108	33	69	128
Influenza	267	200	69	18	78	11	22	11	16	38
Common cold	546	403	113	35	176	18	60	16	42	82
Other respiratory condition	151	129	25	4	69	3	25	4	10	7
Digestive system condition	31	22	7	1	7	1	4	1	4	3
Injuries	172	130	44	9	48	3	24	7	10	23
All other acute conditions	181	147	42	13	59	2	29	7	11	14

Table 19
Number of Acute Conditions Per 100 Persons Per Year by Geographic Area, 1977-78.

	State	Oahu	East Hon.	West Hon.	Cent. Oahu	Waia-nae	Wind-ward	Kauai	Maui County	Hawaii
All acute conditions	169.6	163.9	139.5	116.7	201.8	160.7	167.5	150.7	171.9	225.2
Infective parasitic diseases	12.9	13.2	10.2	6.4	16.0	12.0	18.5	6.8	15.3	11.1
Respiratory condition	112.0	106.9	89.0	77.6	136.9	122.8	96.7	98.4	114.2	160.7
Influenza	31.0	29.2	29.6	24.8	33.1	40.9	20.5	34.7	26.9	48.3
Common cold	63.4	58.8	48.4	46.3	74.4	67.7	53.8	49.3	70.6	103.6
Other respiratory condition	17.6	18.9	11.0	6.5	29.5	14.2	22.4	14.3	16.7	8.8
Digestive system condition	3.6	3.2	3.3	1.6	3.3	3.2	4.2	3.1	6.8	4.7
Injuries	20.0	19.0	19.0	13.1	20.5	12.1	21.8	21.0	16.6	30.0
All other acute conditions	21.0	21.5	18.0	18.0	25.0	10.6	26.4	21.2	19.1	18.7

Table 20

Incidence of Acute Conditions in the Past Year by Age, 1977-78

	All Ages	Under 6 Years	6 - 16 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
All acute conditions	1,462,026	288,311	324,176	602,818	183,270	63,431
Infective parasitic diseases	111,485	32,472	30,950	37,787	7,888	2,388
Respiratory condition	965,857	195,590	220,921	388,687	119,351	41,308
Influenza	267,652	34,482	62,894	124,018	34,182	12,076
Common cold	546,530	135,797	125,014	199,831	63,632	22,256
Other respiratory condition	151,675	25,312	33,013	64,838	21,536	6,976
Digestive system condition	31,360	4,092	4,016	16,262	5,456	1,534
Injuries	172,057	18,703	37,715	81,188	24,247	10,204
All other acute conditions	181,266	37,474	30,574	78,893	26,328	7,998

Table 21

Number of Acute Conditions Per 100 Persons Per Year by Age, 1977-78

	All Ages	Under 6 Years	6 - 16 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
All acute conditions	169.6	327.7	181.2	164.3	106.9	111.7
Infective parasitic diseases	12.9	36.9	17.3	10.3	4.6	4.2
Respiratory condition	112.0	222.3	123.5	106.0	69.6	72.7
Influenza	31.0	39.2	35.2	33.8	19.9	21.2
Common cold	63.4	154.3	69.9	54.5	37.1	39.2
Other respiratory condition	17.6	28.8	18.5	17.7	12.6	12.3
Digestive system condition	3.6	4.6	2.2	4.4	3.2	2.7
Injuries	20.0	21.2	21.1	22.1	14.1	18.0
All other acute conditions	21.0	42.6	17.1	21.5	15.4	14.1

Table 22

Incidence of Acute Conditions for Males in the Past Year by Age, 1977-78

	All Ages	Under 6 Years	6 - 16 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
All acute conditions	700,301	152,371	164,220	276,558	86,218	29,934
Infective parasitic diseases	53,495	17,326	14,242	16,594	4,117	1,217
Respiratory conditions	460,733	103,150	107,116	172,639	58,381	19,447
Influenza	122,056	16,634	31,649	50,899	17,681	5,192
Common cold	263,723	73,194	56,586	94,513	29,207	10,223
Other respiratory condition	74,954	13,321	18,881	27,227	11,494	4,032
Digestive system condition	15,906	3,463	2,219	7,132	2,264	828
Injuries	101,532	10,249	25,099	50,636	11,735	3,812
All other acute conditions	68,635	18,184	15,545	20,557	9,720	4,630

Table 23

Number of Acute Conditions Per 100 Males Per Year by Age, 1977-78

	All Ages	Under 6 Years	6 - 16 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
All acute conditions	161.2	337.8	178.4	148.6	97.9	103.1
Infective parasitic diseases	12.3	38.4	15.5	9.2	4.7	4.2
Respiratory conditions	106.1	228.7	116.4	95.9	66.3	67.0
Influenza	28.1	36.9	34.4	28.3	20.1	17.9
Common cold	60.7	162.3	61.5	52.5	33.2	35.2
Other respiratory condition	17.2	29.5	20.5	15.1	13.0	13.9
Digestive system condition	3.7	7.7	2.4	4.0	2.6	2.8
Injuries	23.4	22.7	27.3	28.1	13.3	13.1
All other acute conditions	15.8	40.3	16.9	11.4	11.0	15.9

Table 24

Incidence of Acute Conditions for Females in the Past Year by Age, 1977-78

	All Ages	Under 6 Years	6 - 16 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
All acute conditions	761,725	135,960	159,956	335,260	97,052	33,497
Infective parasitic diseases	57,990	15,146	16,709	21,193	3,770	1,171
Respiratory conditions	505,124	92,441	113,806	216,048	60,970	21,860
Influenza	145,596	17,848	31,246	73,118	16,501	6,883
Common cold	282,808	62,603	68,428	105,318	34,426	12,034
Other respiratory condition	76,721	11,990	14,132	37,612	10,043	2,944
Digestive system condition	15,455	629	1,798	9,131	3,192	706
Injuries	70,525	8,454	12,616	30,552	12,512	6,391
All other acute conditions	112,631	19,290	15,029	58,336	16,608	3,368

Table 25

Number of Acute Conditions Per 100 Females Per Year by Age, 1977-78

	All Ages	Under 6 Years	6 - 16 Years	17 - 44 Years	45 - 64 Years	65 Years and Over
All acute conditions	178.1	317.1	184.1	179.5	116.4	120.6
Infective parasitic diseases	13.6	35.3	19.2	11.3	4.5	4.2
Respiratory conditions	118.1	215.6	131.0	115.7	73.1	78.7
Influenza	34.0	41.6	36.0	39.2	19.8	24.8
Common cold	66.1	146.0	78.8	56.4	41.3	43.3
Other respiratory condition	17.9	28.0	16.3	20.1	12.0	10.6
Digestive system condition	3.6	1.5	2.1	4.9	3.8	2.5
Injuries	16.5	19.7	14.5	16.4	15.0	23.0
All other acute conditions	26.3	45.0	17.3	31.2	19.9	12.1

Table 26

Incidence of Acute Conditions in the Past Year by Ethnicity, 1977-78.

	Caucasian	Japanese	Hawaiian, Pt. Hawaiian	Filipino	Chinese	Other & Unknown
All acute conditions	460,578	287,107	310,556	122,449	36,098	245,237
Infective parasitic diseases	49,462	12,383	25,432	3,005	2,551	18,653
Respiratory condition	271,457	202,162	213,307	90,368	22,026	166,537
Influenza	95,489	41,544	59,082	23,207	4,008	44,322
Common cold	125,438	128,824	127,066	52,294	14,671	98,238
Other respiratory condition	50,530	31,794	27,160	14,868	3.347	23,977
Digestive system condition	12,836	6,253	5,672	1,028	268	5,303
Injuries	56,242	33,844	32,567	11,471	6,406	31,529
All other acute conditions	70,582	32,466	33,578	16,577	4,848	23,215

Table 27

Number of Acute Conditions Per 100 Persons Per Year by Ethnicity, 1977-78.

	Caucasian	Japanese	Hawaiian, Pt. Hawaiian	Filipino	Chinese	Other & Unknown
All acute conditions	200.5	131.0	194.7	139.3	93.4	192.9
Infective parasitic diseases	21.5	5.6	15.9	3.4	6.6	14.7
Respiratory condition	118.2	92.3	133.7	102.8	57.0	131.0
Influenza	41.6	19.0	37.0	26.4	10.4	34.9
Common cold	54.6	58.8	79.7	59.5	38.0	77.3
Other respiratory condition	22.0	14.5	17.0	16.9	8.6	18.9
Digestive system condition	5.6	2.8	3.6	1.2	0.7	4.2
Injuries	24.5	15.4	20.4	13.0	16.6	24.8
All other acute conditions	30.7	14.8	21.0	18.9	12.5	18.3

Table 28. Number of Restricted Days for Persons in the Past 12 Months by Geographic Area and Age, 1977-78.

	All Ages	Under 17	17-44 years	45-64 years	65 & over
State	10,612,444	2,198,471	4,122,197	2,725,700	1,566,076
Oahu	8,725,627	1,784,219	3,526,397	2,167,088	1,247,923
East Honolulu	2,831,008	272,669	1,080,511	862,092	615,736
West Honolulu	774,848	110,440	228,282	301,972	134,154
Central Oahu	3,167,483	827,046	1,478,873	593,563	268,001
Waianae	748,360	262,488	255,336	142,804	87,732
Windward	1,203,930	311,576	483,395	266,658	142,301
Kauai	275,418	56,326	101,980	73,290	43,822
Maui County	780,712	116,299	246,521	266,075	151,817
Hawaii	830,688	241,627	247,300	219,247	122,514

Table 29. Average Number of Restricted Days Per Person Per Year in the Past 12 Months by Geographic Area and Age, 1977-78.

	All Ages	Under 17	17-44 years	45-64 years	65 & over
State	12.3	8.2	11.2	15.9	27.6
Oahu	12.7	8.5	11.6	16.4	30.5
East Honolulu	12.1	5.4	10.3	14.8	29.0
West Honolulu	10.2	5.5	7.6	16.4	18.8
Central Oahu	13.4	9.3	13.7	18.5	33.8
Waianae	27.1	22.5	23.7	35.7	71.7
Windward	10.7	7.9	9.7	13.6	41.8
Kauai	8.1	5.1	8.2	9.9	14.1
Maui County	12.8	6.0	11.1	19.8	27.0
Hawaii	10.4	9.5	8.5	12.1	17.2

Table 30. Number of Bed Days for Persons in the Past 12 Months by Geographic Area and Age, 1977-78.

	All Ages	Under 17	17-44 years	45-64 years	65 & over
State	4,030,035	1,028,916	1,452,865	962,926	585,328
Oahu	3,198,899	834,938	1,158,506	761,520	443,935
East Honolulu	982,071	104,388	359,555	300,070	218,058
West Honolulu	279,973	46,056	84,325	102,174	47,418
Central Oahu	1,231,153	448,580	491,916	201,157	89,500
Waianae	348,309	157,249	82,778	69,251	39,031
Windward	357,393	78,665	139,932	88,868	49,928
Kauai	127,332	19,632	42,134	42,916	22,650
Maui County	282,371	51,388	114,119	69,766	47,099
Hawaii	421,432	122,958	138,106	88,724	71,644

Table 31. Average Number of Bed Days Per Person Per Year in the Past 12 Months by Geographic Area and Age, 1977-78.

	All Ages	Under 17	17-44 years	45-64 years	65 & over
State	4.7	3.8	4.0	5.6	10.3
Oahu	4.6	4.0	3.8	5.8	10.8
East Honolulu	4.2	2.1	3.4	5.1	10.3
West Honolulu	3.7	2.3	2.8	5.5	6.6
Central Oahu	5.2	5.0	4.6	6.3	11.3
Waianae	12.6	13.5	7.7	17.3	31.9
Windward	3.2	2.0	2.8	4.5	14.7
Kauai	3.7	1.8	3.4	5.8	7.3
Maui County	4.6	2.6	5.1	5.2	8.4
Hawaii	5.3	4.8	4.7	4.9	10.0

Table 32
Number of Work Days Lost for Persons 17-65 Years of Age in the Past 12 Months by Geographic Area and Age, 1977-78.

	17-65 Years	17-44 Years	45-65 Years
State	1,709,151	1,039,915	669,236
Oahu	1,323,300	811,110	512,190
East Honolulu	557,299	278,930	278,369
West Honolulu	152,775	76,338	76,417
Central Oahu	386,868	282,242	104,626
Waianae	38,268	23,304	14,964
Windward	188,109	150,295	37,814
Kauai	70,347	40,675	29,672
Maui County	182,860	97,982	84,878
Hawaii	132,644	90,148	42,496

Table 33
Average Number of Work Days Lost Per Person 17-65 Years of Age Per Year in the Past 12 Months by Geographic Area and Age, 1977-78.

State	4.6	4.1	5.6
Oahu	4.4	3.9	5.6
East Honolulu	4.7	3.6	6.6
West Honolulu	4.7	3.8	6.4
Central Oahu	4.2	4.0	4.8
Waianae	4.6	3.8	6.8
Windward	4.0	4.5	2.8
Kauai	4.8	4.3	5.6
Maui County	7.0	5.9	9.0
Hawaii	4.2	4.9	3.3

Table 34
Total Number and Average School Days Lost Per Person 6-16 Years of Age in the Past 12 Months by Geographic Area and Age, 1977-78.

	Total	Average
State	593,326	3.3
Oahu	436,976	3.1
East Honolulu	109,974	3.1
West Honolulu	39,472	2.8
Central Oahu	178,883	3.2
Waianae	42,846	5.3
Windward	65,802	2.4
Kauai	19,139	2.6
Maui County	40,433	3.0
Hawaii	96,778	5.6

TABLE 35

TYPE OF HEALTH COVERAGE BY COUNTY PER 100 FAMILIES, 1978-79

	STATE	HONOLULU	HAWAII	MAUI	MOLOKAI	LANAI	KAUAI
None	3.6	3.1	3.6	6.2	4.3	--	5.7
*HMSA	30.3	28.6	33.5	32.4	45.3	68.4	46.6
Kaiser	6.2	6.9	0.3	9.2	--	--	0.3
**DSSH & Medicaid	4.6	4.6	6.7	1.6	17.4	5.3	5.2
Medicare	1.2	1.0	1.7	1.6	1.9	--	2.2
Military Champus	4.6	5.9	0.6	0.6	1.2	--	0.5
Other Gov't	5.1	6.5	0.6	0.6	--	--	0.9
Other	6.5	5.8	9.1	10.4	2.5	2.6	6.7
HMSA & Kaiser	2.7	3.1	0.3	2.9	0.6	--	0.3
HMSA & Medicare	9.8	8.7	16.1	11.1	9.3	13.1	13.6
HMSA & DSSH or Medicaid	1.7	1.2	5.0	1.6	6.8	--	2.8
HMSA & Military or Other Gov't	2.4	2.7	3.5	0.6	0.6	2.6	1.0
HMSA & Other	12.5	12.9	12.1	12.1	5.6	5.3	8.4
Kaiser w/ Combinations	3.3	3.8	--	3.6	3.6	--	--
DSSH & Medicaid w/ Combinations	1.6	1.5	3.1	1.0	1.2	2.6	2.1
Medicare w/ Combinations	1.2	0.8	2.4	2.9	--	--	2.1
Gov't Ins.	1.5	1.8	0.3	0.3	--	--	0.2
Unknown or Other	1.0	1.0	1.3	1.0	2.5	--	1.4

*Hawaii Medical Service Association

**Department of Social Services and Housing

TABLE 36

TYPE OF HEALTH COVERAGE PER 100 FAMILIES BY TYPE OF MEDICAL SERVICES 1978-79

	DOCTOR UTILIZATION	HOSPITAL-IZATION	PURCHASED MEDICINE	DENTIST UTILIZATION	OTHER MEDICAL EXPENSES
None	59.3	14.8	52.9	33.6	21.3
*HMSA	87.9	20.8	81.3	67.6	38.8
Kaiser	74.8	12.8	70.0	66.9	40.7
**DSSH & Medicaid	80.3	33.4	73.6	58.7	24.3
Medicare	76.5	17.6	73.2	40.2	42.0
Military-Champus	94.6	32.2	83.3	79.1	35.6
Other Government	68.1	32.6	61.8	55.7	27.8
Other	86.3	20.9	75.0	59.1	38.7
HMSA & Kaiser	91.2	26.5	87.6	75.2	40.4
HMSA & Medicare	93.4	27.4	88.6	60.0	49.7
HMSA & DSSH or Medicaid	89.2	29.9	83.9	67.4	36.7
HMSA & Military or Other Gov't	96.0	21.4	88.2	90.0	48.1
HMSA & Other	93.7	19.0	88.4	83.4	48.0
Kaiser with Combinations	87.6	32.3	87.8	63.3	42.7
DSSH & Medicaid with Combinations	92.2	35.0	86.3	38.3	36.6
Medicare with Combinations	81.2	31.5	83.2	43.5	43.3
Gov't Insurance	90.4	15.1	68.2	68.2	49.1
Unknown & Other	70.9	16.2	68.5	51.4	36.2

*Hawaii Medical Service Association

**Department of Social Services and Housing

TABLE 37

FAMILY SHARE OF MEDICAL CARE COST PER 100 FAMILIES BY TYPE OF MEDICAL SERVICES, 1978-79

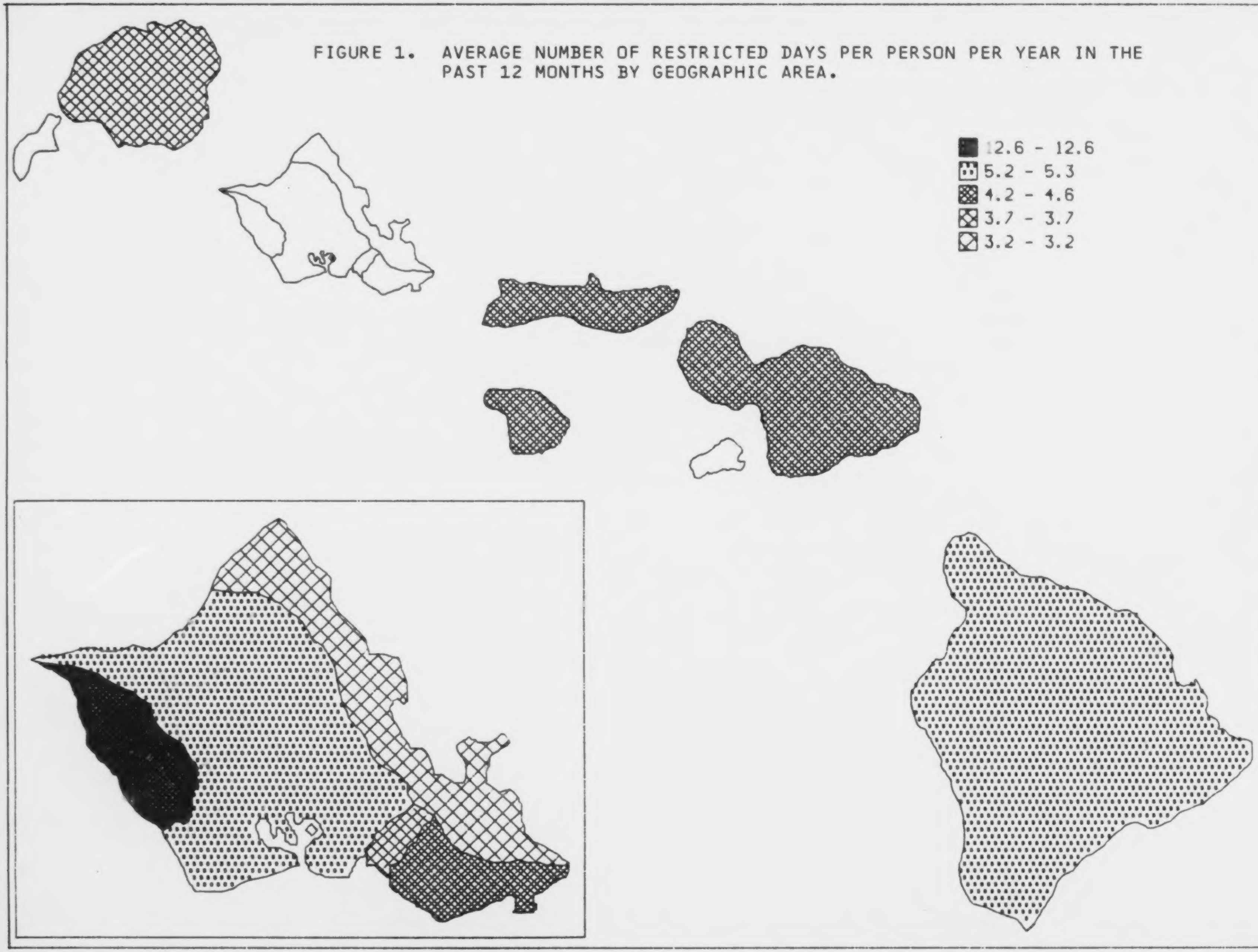
Amount Paid by Family	DOCTOR UTILIZATION	HOSPITAL-IZATION	PURCHASED MEDICINE	DENTIST UTILIZATION	OTHER MEDICAL EXPENSES
None	28.4	41.4	21.3	18.0	10.4
$1 - $149	41.8	33.3	63.3	41.2	61.8
$150 - $299	12.3	9.0	8.0	15.9	18.2
$300 - $449	6.6	4.0	3.2	9.1	5.4
$450 - $999	6.8	5.9	2.1	9.5	2.6
$1000 and over	4.1	6.4	2.1	6.3	1.4

TABLE 38

PERCENT OF MEDICAL CARE COST PAID BY HEALTH INSURANCE PER 100 FAMILIES BY TYPE OF MEDICAL SERVICES 1978-79

None	11.5	14.8	47.2	51.2	67.2
1% - 49%	3.2	1.7	2.9	3.6	8.6
50% - 99%	62.0	49.6	30.7	30.9	15.7
All	23.3	33.9	19.2	14.4	8.5

FIGURE 1. AVERAGE NUMBER OF RESTRICTED DAYS PER PERSON PER YEAR IN THE PAST 12 MONTHS BY GEOGRAPHIC AREA.


■ 12.6 - 12.6
▦ 5.2 - 5.3
▩ 4.2 - 4.6
▧ 3.7 - 3.7
▨ 3.2 - 3.2

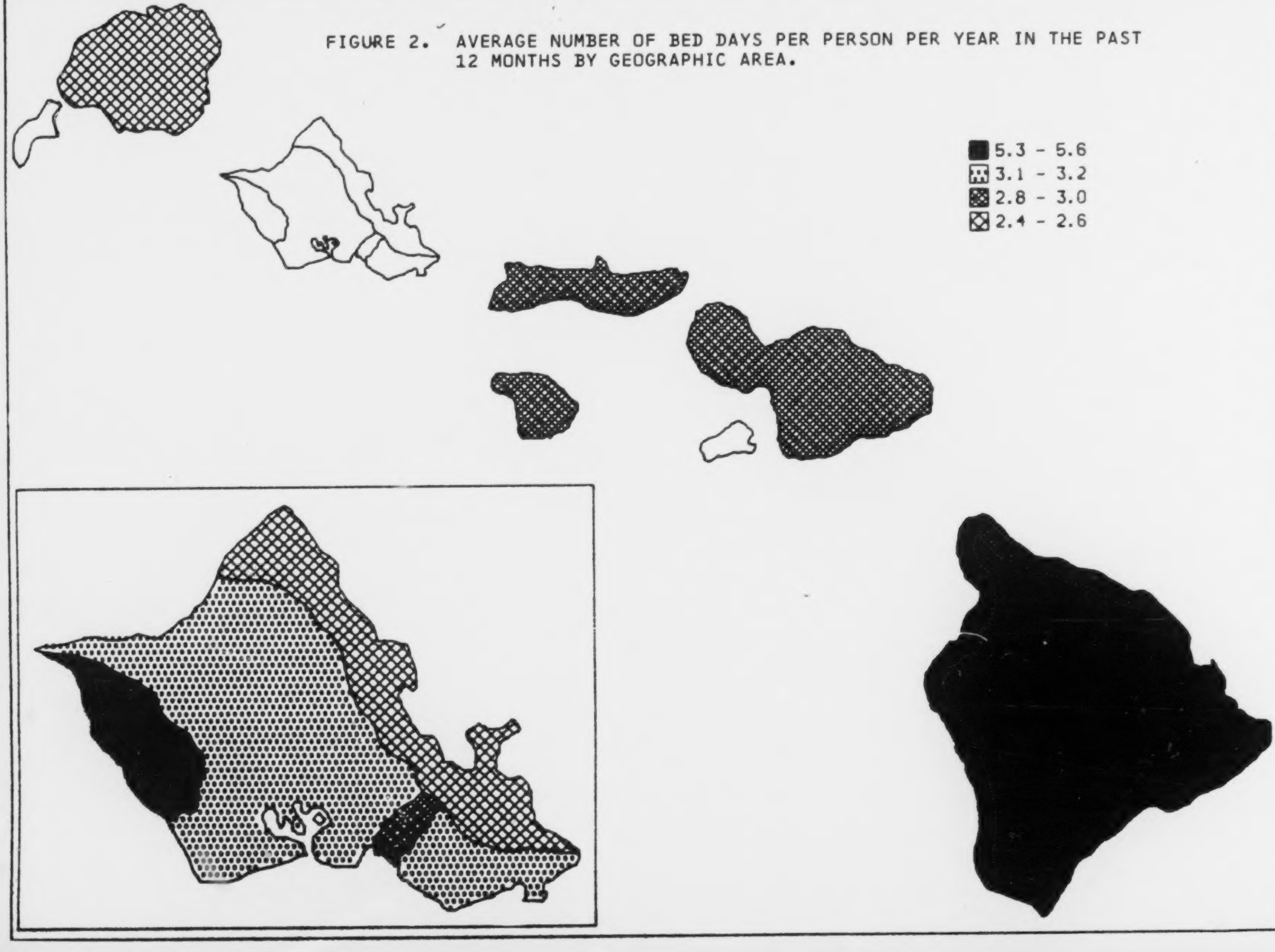


FIGURE 2. AVERAGE NUMBER OF BED DAYS PER PERSON PER YEAR IN THE PAST 12 MONTHS BY GEOGRAPHIC AREA.

■ 5.3 - 5.6
▦ 3.1 - 3.2
▩ 2.8 - 3.0
▨ 2.4 - 2.6

FIGURE 3. AVERAGE NUMBER OF WORK DAYS LOST PER PERSON 17-65 YEARS OF AGE PER YEAR IN THE PAST 12 MONTHS BY GEOGRAPHIC AREA.

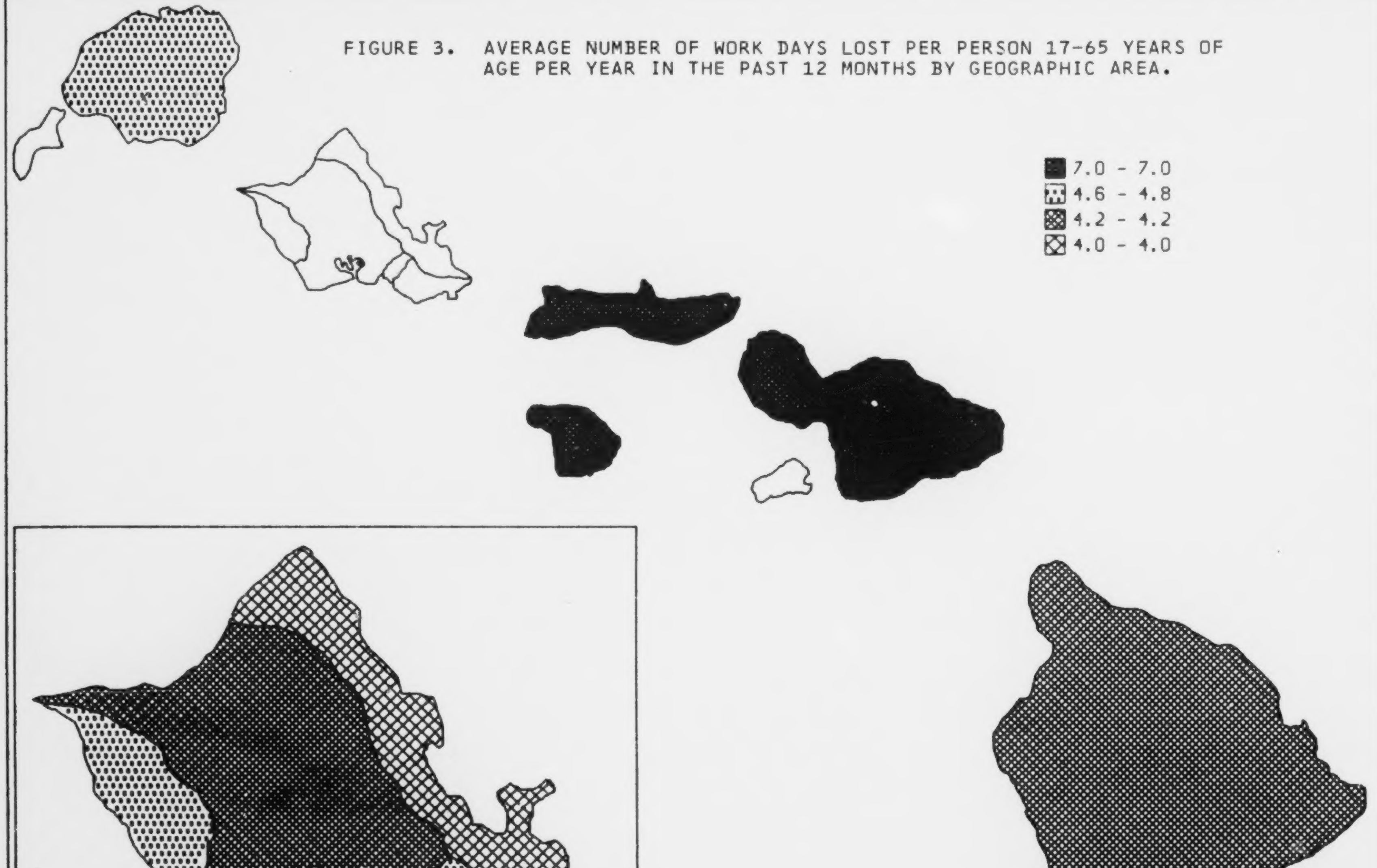

■ 7.0 - 7.0
▦ 4.6 - 4.8
▩ 4.2 - 4.2
▨ 4.0 - 4.0

TABLE 1

HAWAII STATE HEALTH PLANNING & DEVELOPMENT AGENCY

MONTHLY SUMMARY OF ACUTE CARE HOSPITALS

CITY-COUNTY OF HONOLULU

Month ANNUAL 1978

	MEDICAL-SURGICAL					CRITICAL CARE					OBSTETRIC				
	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy
METROPOLITAN															
Kaiser	126/106	5364	98.3	6.9	78.0/92.7	8		13.6		169.6	30	1817	15.0	3.1	50.1
Kapiolani	68	2186	16.0	2.7	23.5						60	7449	64.7	3.3	107.9
Children's						12		6.8		57.0					
Kuakini	211	7643	193.1	9.2	91.5	25		19.1		76.5					
Queen's	396	14752	297.9	7.5	75.2	22		16.7		76.1	25	2393	21.1	3.5	84.4
St. Francis	244/198	7453	177.9	8.6	72.9/89.8	14		12.3		87.8					
Straub	152	6125	118.8	7.1	78.2	16		10.9		68.3					
Sub-Total	1197/1131	43523	902.0	7.5	75.4/79.8	97		74.4		76.7	115	11659	100.9	3.3	87.7
SUBURBAN															
Castle	77	3880	62.5	6.1	81.2	8		4.1		50.9	14	687	5.4	2.9	38.8
Kahuku	12	443	3.4	2.7	28.1	2		.4		17.8	3	255	1.4	2.0	46.9
Pearlridge	26	1164	15.0	4.8	57.8						2	0	-	-	-
Wahiawa	49	1845	34.5	6.3	70.3	4		1.6		39.3	14	374	3.1	2.8	21.9
Sub-Total	164	7332	115.4	5.7	70.4	14		6.0		42.8	33	1316	9.9	2.7	30.0
GRAND TOTAL	1361/1295	50855	1017.4	7.3	74.8/78.6	111		80.4		72.4	148	12975	110.8	3.3	74.8

Tripler	391/412	13032	329.8	9.2	84.3/80.0						92/49	3773	39.8	3.9	43.3/81.3

	PEDIATRIC					OTHER					TOTAL				
	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy
METROPOLITAN															
Kaiser	18	678	10.0	5.0	55.5						174/154	7859	123.3	5.9	70.9/80.1
Kapiolani											128	9635	80.7	3.1	63.1
Children's	88	3646	50.0	4.8	56.8	(12		7.5		62.8)	88	3646	50.0	4.8	56.8
Kuakini											211	7643	193.1	9.2	91.5
Queen's	35	1612	21.2	4.2	60.6	50	1627	45.9	10.1	91.7	506	20384	386.1	7.0	76.3
St. Francis	12	254	2.0	3.1	16.9	-	279	5.5	7.4	-	256/210	7986	184.4	8.4	72.4/88.3
Straub	-	28	.3	4.1	-	-	61	1.0	6.1	-	152	6214	120.1	7.1	79.0
Sub-Total	153	6218	83.5	4.7	54.6	50	1967	52.4	9.7	104.8	1515/1449	63230	1138.7	6.6	75.2/78.6
SURURBAN															
Castle	-	224	2.4	3.8	-	10	257	8.8	10.9	88.4	101	5048	79.1	5.8	78.4
Kahuku	-	80	.6	2.5	-						15	778	5.4	2.5	35.9
Pearlridge	4	116	1.0	3.0	24.7						32	1280	16.0	4.6	50.0/53.4
Wahiawa	15	263	2.1	3.6	13.8						78	2482	39.6	5.6	50.8
Sub-Total	19	683	6.0	3.4	31.7	10	257	8.8	10.9	88.4	226	9588	140.2	5.3	62.0
GRAND TOTAL	172	6901	89.5	4.5	52.0	60	2224	61.2	9.8	102.1	1741/1675	72386	1278.9	6.4	73.5/76.4

(PSYCHIATRIC)

Tripler	33/31	1305	24.8	6.9	75.1/79.9	50/46	1039	36.6	12.8	73.1/79.5	566/538	19149	430.9	8.2	76.1/80.1

TABLE 1A

HAWAII STATE HEALTH PLANNING & DEVELOPMENT AGENCY

MONTHLY SUMMARY OF ACUTE CARE HOSPITALS

COUNTIES OF HAWAII, MAUI, AND KAUAI

Month ANNUAL 1978

	MEDICAL-SURGICAL					CRITICAL CARE					OBSTETRIC				
	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy
HAWAII COUNTY															
Hilo Hospital	116	5250	62.9	5.1	54.2	12		5.3		44.5	18	1157	10.7	2.6	59.5
Honokaa	21	347	4.9	4.6	23.2	2		.3		15.8	4	117	.6	1.9	16.0
Kau Hospital	5	60	.6	3.5	*8.3	1		-		-	2	40	.2	2.2	10.7
Kohala	12	101	.8	2.8	6.7						4	19	.07	1.3	1.7
Kona	35	1750	18.1	3.8	51.7	6		1.9		30.9	8	463	3.2	2.5	39.5
**Sub-Total	189	7508	87.2	4.7	46.1	21		7.5		35.7	36	1796	14.8	2.5	41.1
MAUI COUNTY															
Kula San	4	0	-	-	-										
Lanai	4	36	.4	2.6	8.8	1		-		-	1	11	.06	1.3	6.3
Maui Memorial	114	4853	81.7	6.2	71.7	8		3.6		45.3	24	1126	8.1	3.0	33.7
Molokai	18	310	3.6	3.5	20.2	2		-		-	2	114	.6	1.9	29.0
Sub-Total	140	5199	85.7	6.0	61.2	11		3.6		33.0	27	1251	8.7	2.9	32.3
KAUAI COUNTY															
Kauai Veterans	31	833	14.8	6.7	47.8	2		.5		24.1	7	239	1.7	2.5	24.2
Wilcox	81	2190	32.5	6.0	40.1	8		2.9		36.8	9	656	5.5	2.9	61.1
Sub-Total	112	3023	47.3	6.2	42.3	10		3.4		34.3	16	895	7.2	2.8	44.9
**GRAND TOTAL	441	15730	220.2	5.5	49.9	42		14.6		34.7	79	3842	30.7	2.7	38.9

*Calculations reflects bed changes during the year. **Occupancy calculated on bed capacity at the end of the year.

	PEDIATRIC					PSYCHIATRIC					TOTAL				
	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy
HAWAII COUNTY															
Hilo Hospital	30	655	7.1	4.2	23.6	4	351	6.8	6.8	171.0	168	7413	87.5	4.3	52.1
Honokaa	2	27	.2	2.2	8.0						27	491	5.7	3.8	21.0
Kau Hospital											7	100	.8	3.0	*8.8
Kohala											16	120	.9	2.6	5.5
Kona Hospital	2	147	2.0	2.8	101.7	8	104	1.3	4.7	16.0	53	2464	24.6	3.6	46.4
**Sub-Total	34	829	9.3	3.7	27.3	12	455	8.1	6.3	67.7	271	10588	119.4	4.1	44.1
MAUI COUNTY															
Kula San											4	0	-	-	-
Lanai						1	0	-	-	-	6	47	.4	2.3	6.9
Maui	5	336	3.3	2.5	65.2	2	263	3.5	4.0	176.2	145	6578	96.6	5.4	66.6
Molokai	4	58	.3	1.9	7.8	1	13	.07	1.9	6.9	25	495	4.6	2.9	18.4
Sub-Total	9	394	3.6	2.4	39.7	4	276	3.6	3.9	89.8	180	7120	101.6	5.2	56.4
KAUAI COUNTY															
Kauai Veterans	-	104	1.1	3.6	-						38	1176	17.6	5.6	46.2
Wilcox	6	382	3.3	++	55.0						96	3228	41.3	5.4	43.0
Sub-Total	6	486	4.4	3.6	72.8						134	4404	58.9	5.4	43.9
*GRAND TOTAL	49	1709	17.2	3.2	35.1	16	731	11.7	5.4	73.2	585	22220	279.9	4.7	47.8

++Pediatric data included in medical/surgical.
*Calculations reflects bed changes during the year. **Occupancy calculated on bed capacity at the end of the year.

TABLE 2

HAWAII STATE HEALTH PLANNING & DEVELOPMENT AGENCY

MONTHLY SUMMARY OF SPECIALTY LONG TERM CARE HOSPITALS

STATE OF HAWAII

Month ANNUAL 1978

	PSYCHIATRIC					TUBERCULOSIS					MENTALLY RETARDED					OTHER						TOTAL				
	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy		Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy
Hale Mohalu																a.	21	1	20.0	-	95.1	21	1	20.0	-	95.1
Hawaii State	199	786	174.6	54.2	87.8																	199	786	174.6	54.2	87.8
Leahi Hospital	20	30	19.0	194.4	95.0	21	87	13.4	49.8	63.6	12	35	4.3	39.1	36.2	b.	5	0	-	-	-	58	152	36.7	77.0	63.3
Mahelona	9	113	4.3	15.3	47.7	11	8	1.1	58.4	10.2												20	121	5.4	18.0	27.1
Rehabilitation																c.	76	512	60.3	43.1	*90.5	76	512	60.3	43.1	*90.5
Shriner's																d.	40	216	27.0	57.9	67.5	40	216	27.0	57.9	67.5
Kalaupapa																a.	24	38	7.0	9.4	29.2	24	38	7.0	9.4	29.2
Waimano											600	84	473.3	3863	78.9							600	84	473.3	3863	78.9
**TOTAL	228	929	197.9	53.7	86.8	32	95	14.5	50.6	45.2	612	119	477.7	3350	78.1		166	767	114.3	45.3	68.9	1038	1910	804.4	435.2	77.5

a. Leprosy
b. Medical/Surgical
c. Rehabilitation
d. Children's Orthopedics

*Calculations reflects bed changes during the year
**Occupancy calculated on bed capacity at the end of the year

TABLE 3

HAWAII STATE HEALTH PLANNING & DEVELOPMENT AGENCY

MONTHLY SUMMARY OF SKILLED NURSING AND INTERMEDIATE CARE FACILITIES

CITY-COUNTY OF HONOLULU

Month ANNUAL 1978

	SKILLED NURSING					INTERMEDIATE CARE					TOTAL				
	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy	Beds	Admissions	Daily Census	Length of Stay	% Occupancy
Ann Pearl						84	92	80.1	15.9	95.4	84	92	80.1	15.9	95.4
Arcadia	28	72	26.2	33.1	93.7						28	72	26.2	33.1	93.7
Beverly Manor	108	127	106.2	289.1	98.3						108	127	106.2	289.1	98.3
Castle Memorial	35	79	37.2	95.1	106.3						35	79	37.2	95.1	106.3
Convalescent Cntr.	180	158	166.8	357.8	*95.5						180	158	166.8	357.8	*95.5
Crawford's						68	52	62.6	169.6	92.1	68	52	62.6	169.6	92.1
Hale Ho Aloha						78	47	70.3	16.9	*95.6	78	47	70.3	16.9	*95.6
Hale Malamalama						31	24	31.0	677.7	99.9	31	24	31.0	677.7	99.9
Hale Nani	232	168	230.5	458.8	99.4						232	168	230.5	458.8	99.4
Island Nursing	42	13	41.9	1027	99.7						42	13	41.9	1027	99.7
Kahanaola	40	80	32.4	8.8	81.0						40	80	32.4	8.8	81.0
Kahuku	11	27	8.7	12.6	79.3						11	27	8.7	12.6	79.3
Kuakini	31	86	30.8	152.1	99.5						31	86	30.8	152.1	99.5
Leahi	98	48	97.3	761.3	99.3	42	9	42.0	972.0	99.9	140	57	139.3	795.8	99.5
Maluhia	112	73	110.6	1076	98.8	38	7	37.9	658.4	99.9	150	80	148.5	1025.3	99.0
Maunalani	101	69	99.4	455.9	98.4						101	69	99.4	455.9	98.4
Nuuanu	76	49	76.0	658.7	*100.9						76	49	76.0	658.7	*100.9
St. Francis	52	176	48.6	93.5	93.4						52	176	48.6	93.5	93.4
Wahiawa	51	27	50.8	587.1	99.6						51	27	50.8	587.1	99.6
**GRAND TOTAL	1197	1252	1163.4	333.6	97.2	341	231	323.9	220.4	95.0	1538	1483	1487.3	318.4	96.7

*Calculations reflects bed changes during the year. **Occupancy calculated on bed capacity at the end of the year.

TABLE 3A

HAWAII STATE HEALTH PLANNING & DEVELOPMENT AGENCY

MONTHLY SUMMARY OF SKILLED NURSING AND INTERMEDIATE CARE FACILITIES

COUNTIES OF HAWAII, MAUI, AND KAUAI

Month ANNUAL 1978

	SKILLED NURSING					INTERMEDIATE CARE									
						MEDICAL-SURGICAL					OTHER				
	Beds	Admis-sions	Daily Census	Length of Stay	% Occu-pancy	Beds	Admis-sions	Daily Census	Length of Stay	% Occu-pancy	Beds	Admis-sions	Daily Census	Length of Stay	% Occu-pancy
HAWAII COUNTY															
Hilo Care Cntr.											198	114	173.7	513.9	*97.6
Hilo Hospital	36	360	32.3	35.5	89.8	72	221	72,2	245.0	100.3					
Honokaa Hospital	8	15	7.5	106.8	94.0										
Kau Hospital	8	21	6.9	105.0	85.8										
Kohala Hospital	10	19	8.7	68.2	87.4										
Kona Hospital															
**Sub-Total	62	415	55.5	42.7	89.5	72	221	72.2	245.0	100.3	198	114	173,7	513,9	*97.6
MAUI COUNTY															
Hale Makua	120	105	95.2	364.5	*78.1	124	28	39.1	70.8	*62.6					
Kula San	94	37	92.4	911.3	98.3						8	2	7.5	1368	93.7
Lanai Hospital															
Molokai Hospital						6	3	5.5	113.5	91.7					
**Sub-Total	214	142	187.6	542.0	87.7	130	31	44.6	90.2	34.2	8	2	7.5	1368	93.7
KAUAI COUNTY															
Kauai Veterans	6	9	5.9	130.0	99.0										
Samuel Mahelona															
Wilcox Memorial															
Sub-Total	6	9	5.9	130.0	99.0										
**GRAND TOTAL	282	566	249.0	154.7	88.3	202	252	116.8	213.2	57.8	206	116	181.2	533.1	88.0

*Calculations reflects bed changes during the year. **Occupancy calculated on bed capacity at the end of the year.

	COMBINED SNF/ICF					TOTAL				
	Beds	Admis-sions	Daily Census	Length of Stay	% Occu-pancy	Beds	Admis-sions	Daily Census	Length of Stay	% Occu-pancy
HAWAII COUNTY										
Hilo Care Cntr.						198	114	173.7	513.9	*97.6
Hilo Hospital						108	581	104.5	77.2	96.8
Honokaa Hospital						8	15	7.5	106.8	94.0
Kau Hospital						8	21	6.9	105.0	85.8
Kohala Hospital						10	19	8.7	68.2	87.4
Kona Hospital	26/4	9	3.6	121.9	13.7/89.2	26/4	9	3.6	121.9	13.7/89.2
**Sub-Total	26/4	9	3.6	121.9	13.7/89.2	358/336	759	305.0	145.4	85.2/90.8
MAUI COUNTY										
Hale Makua						244	133	134.3	324.9	*72.8
Kula San						102	39	99.9	934.7	97.9
Lanai Hospital	8	4	5.0	102.1	62.6	8	4	5.0	102.1	62.6
Molokai Hospital						6	3	5.5	113.5	91.7
**Sub-Total	8	4	5.0	102.1	62.6	360	179	244.7	461.1	68.0
KAUAI COUNTY										
Kauai County						6	9	5.9	130.0	99.0
Samuel Mahelona	56	44	54.6	429.5	97.4	56	44	54.6	429.5	97.4
Wilcox Memorial	59	137	63.2	125.2	107.2	59	137	63.2	125.2	107.2
Sub-Total	115	181	117.8	197.6	102.4	121	190	123.7	194.4	102.2
*GRAND TOTAL	149/127	194	126.3	189.4	84.8/99.5	839/817	1128	673.4	206.1	80.3/82.4

*Calculations reflects bed changes during the year. **Occupancy calculated on bed capacity at the end of the year.

CHILDREN'S HEALTH SERVICES DIVISION

CHILDREN'S HEALTH SERVICES DIVISION

SUMMARY

The Children's Health Services Division is concerned with health services to children and child related services to mothers. Programs are carried out through the Maternal and Child Health Branch, Crippled Children Branch and School Health Branch.

The Maternal and Child Health Branch divides its services into three sections: (1) family planning services, (2) maternal and infant services, and (3) children and youth services. The goals of these activities are to assist families to raise healthy, well-adjusted children through public education, parent education, emphasis on preventive measures, and involvement of community leaders in planning activities.

The Family Planning Services Section strives to provide individuals the freedom of choice to determine the number and spacing of their children. In addition a need is seen to help young people develop a responsible attitude toward their roles as parents beginning early in the educational process. The staff of the Office of Family Planning coordinates the statewide efforts of federal, state, and private resources for delivery of quality services, staff education and training, program planning, evaluation, and research. Parent groups, teachers, and young people themselves participate in developing activities. It is estimated that 18,384 women received family planning services during 1978. This is a 13 percent increase over the 16,043 women served in 1977.

The Maternal and Infant Services Section includes both the Maternity and Infant Care (MIC) Project and the Intensive Infant Care Project. The MIC Project maintains three clinics in geographic areas that have a high prevalence of low-income families. These sites are Nanakuli and Waimanalo on Oahu, and Hilo on the Big Island of Hawaii. The clinics offer comprehensive maternity care including prenatal care, postpartum care, and family planning services. Comprehensive pediatric care is given to high-risk, low-income infants for their first year of life. The emphasis in the MIC clinics has been to develop effective programs in parent education, to serve young people as well as low-income families, and lower the incidence of low birth weight newborns in this high-risk population. Table 1 summarizes the activities of the MIC Project clinics during calendar year 1978. There was a 14% drop in the number of deliveries in 1978 (369) compared with 1977 (427). This is partially accounted for by the merging of services with the Waianae Coast Comprehensive Health Center by the Nanakuli clinic.

The Neonatal Intensive Care Nursery at Kapiolani-Children Medical Center has played a significant role in lowering neonatal mortality rates in the State. There were 233 admissions to the nursery in FY 1978, the majority with respiratory distress syndrome and low birth weight. This was an increase of 25% over the 187 infants admitted in 1977. The Ambulatory Pediatric Pulmonary service has continued to follow patients discharged from the nursery to assist in care of their pulmonary problems and to detect early developmental delays.

The Children and Youth Services Section includes the Children and Youth Project; the Child Health Conferences; the Early and Periodic Screening, Diagnosis and Treatment Program; the Preschool Developmental Screening Program; and the Dental Health Project. The Children and Youth Project offers preventive case finding and diagnostic services to any child in Waimanalo younger than 16 years. For low-income children, it offers complete health care, including pediatric care, referral to specialists, hospitalization, dentistry, psychological services, speech services, as well as public health nursing, social casework and nutrition. A total of 2,222 infants and children were enrolled during the calendar year 1978. This figure is virtually the same as the 2,190 enrolled in 1977. Table 2 indicates the numbers of patients receiving services. It is noteworthy that 100% of the two-year-olds and six-year-olds are up to date in their immunization as are 95% of the 16-year-olds.

The Child Health Conferences include medical well-baby clinics, nursing conferences, and pediatric evaluation clinics. Children from birth through five years of age may attend the clinics located throughout the State. Services include health assessment, immunization, child-rearing guidance, nutrition, preventive mental health, and referral to other agencies when needed. Child health conferences are supplemented by public health nursing services in the homes, in day care centers, and at nursing stations. A total of 9,798 children were seen in the child health conferences in fiscal year 1978. This is a five percent increase over the 9,321 children seen in 1977. Table 3 shows the attendance at child health conferences by age and by county. It can be seen that the greatest usage is by infants under one year on the neighbor islands. Table 4 shows the number of children having completed their basic series of immunizations and the number of boosters given. Over 90 percent of those children two years of age and attending child health conferences are up-to-date on their immunizations.

The Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Program, conducted throughout the State, is primarily for children 0 - 21 years of age receiving Medicaid. The screening includes physical and developmental screening, vision-hearing screening, urine screening, testing for anemia, tuberculin skin tests, and immunizations. The staff screened 4,104 children during fiscal year 1978 which is virtually the same as the 4,056 screened in 1977. The percent referred is 28%, down from the 33.6% referred in 1977 and the 45.6% referred in 1976.

The Preschool Developmental Screening Project, which became a Maternal and Child Health Branch activity in October 1975, includes vision, hearing, developmental and behavioral-emotional screening. Behavioral and emotional screening is done in collaboration with Children's Mental Health Services Branch. There were 3,728 children who received first level screening in 1978, a drop of 20 percent from the 4,655 screened in 1977. The percentage of referrals rose from 6.4% to 12% which may indicate more efficient selection of children for first level screening.

The Dental Health Project is part of the Mental Retardation Special Project at Diamond Head Health Center. Approximately 275 children received care during 1978 representing 80 to 100 new cases. These figures are the same for 1977.

The Crippled Children services include diagnosis, medical and surgical treatment, genetic counseling, occupational and physical therapy, speech therapy, social work, and nursing services. Children with severe handicaps requiring long-term complicated management by a variety of professional disciplines are served. During the year 2,899 children under 21 years of age were served; 799 were new cases. A total of 280 patients were hospitalized for a total of 1,718 days. Tables 6-8 relate to this program.

Medically eligible conditions include major birth defects such as cleft lip and palate, spina bifida, heart defects, and orthopedic defects. There are also programs for children with severe asthma, rheumatic fever and rheumatic heart disease, eye problems which can be corrected surgically, hearing impairment, and many others (see Table 8).

In the Mental Retardation Program, there were 367 new admissions, 284 from Oahu and 83 from the neighbor islands. The total number of children served was 1,209.

In the Infant and Child Development Centers, 763 children received training in self-help skills, language development, socialization and/or infant development services. (See Table 9)

The School Health Services Branch is responsible for the planning, coordination, development and implementation of a statewide school health program. With over 200,000 children in Hawaii's schools, this program provides the leadership and direction needed for the delivery of cost-effective school health services. The School Health Services Section provides emergency health services for illness and injury, early identification of health conditions, preventive health care, and referral of problems to appropriate resources with follow-up. The School Health Support Services Section provides vision and hearing screening services for early identification of specific sensory deficits in order to prevent interference with learning and adjustment. In addition, the Support Services Section provides occupational and physical therapy evaluation, consultation and therapy services to the handicapped school population in accordance with PL 94-142. The Diagnostic Services Section consists of an interdisciplinary team of professional staff which evaluates school-aged children who are suspected of having specific learning disabilities. The staff provides diagnostic assessments (social, medical, speech language, psychological, education) and conducts team case conferences to formulate recommendations for parents and teachers. Arrangements are made for appropriate medical referral and follow-up. Tables 10-20 relate to these programs.

TABLE 1

NUMBER OF WOMEN AND INFANTS RECEIVING SERVICES AT THE MATERNITY AND INFANT CARE PROJECT BY TYPE OF SERVICE STATE OF HAWAII, CALENDAR YEAR 1978

Type of Service	Number of Women and Infants Receiving Services
Target Population[a]	11,873
Prenatal Care	365
Under 15 Years Old	2
15 Years Old	8
16 - 34 Years Old	345
35 Years and Over	10
Total Deliveries	369
Live Births Under 2501 Grams	23
Infants Admitted for High-Risk Infant Care[b]	52
Family Planning Case Load	1,286
New Admissions	394
Admissions Selecting Oral Contraceptives	205
Admissions Selecting Intrauterine Device	100

a/ Population estimate of women 14-44 years of age living in census tract of Nanakuli (96-98), Waimanalo (113) and Hilo (203-209) x percent of estimated persons 16 and over with income under $15,000 in the corresponding census tract. (Census tract refers to the 1950 census tract boundaries)

b/ High Risk: Having any prenatal, intrapartum, developmental or hereditary condition or other circumstance which increases the risk of survival and/or to normal development. Total number of new admissions.

TABLE 2

WAIMANALO CHILDREN AND YOUTH PROJECT ACTIVITIES STATE OF HAWAII, CALENDAR YEAR 1978

Population Movement or Type of Service	Number of Encounters	Number of Children
Target Population*		3,592
Total Number Enrolled Any Part of 1978		2,222
Current Enrollment, December 1978		1,871
New Enrollees in 1978		287
Moved Away		158
Became Over Age (16 years old)		128
Deceased		0
Medical Services		
Episodic Care	4,796	NA
Health Assessments	9,426	1,894
Public Health Nursing Services		
Home Visits	779	895
Hospital Visits	116	895
Speech and Hearing Services		
Screening	883	418
Therapy	439	20
Dental Referrals	---	552

*Based on adjusted figures for U.S. Census 1970.

TABLE 3

INFANTS AND CHILDREN SERVICED IN CHILD HEALTH CONFERENCES BY COUNTY COMPARED WITH ESTIMATED POPULATION BY AGE GROUPS STATE OF HAWAII, FISCAL YEAR 1978

	Infants Under 1 Year			Children Over 1 Year		
		Served in CHC			Served in CHC	
	Population[a]	Number	Percent[b]	Population[a]	Number	Percent[b]
State	17,409	2,553	14.7	81,798	7,245	8.9
Honolulu County	14,418	1,896	13.2	67,072	5,459	8.1
Hawaii County	1,375	271	19.7	6,579	693	10.5
Maui County	1,007	256	25.4	5,073	774	15.3
Kauai County	609	130	21.3	3,074	319	10.3

a/ Estimated as of July 1, 1976, from "Provisional Resident Population Estimated by County, Age, and Sex", Research and Statistics Office.

b/ Percent of 1976 total population in age group.

TABLE 4

NUMBER OF IMMUNIZATIONS RECEIVED BY CHILDREN IN CHILD HEALTH CONFERENCES
STATE OF HAWAII, FISCAL YEAR 1978

Type of Immunization	Basic Series Completed in 1978[a]	Boosters
DPT[b] or DT	2,535	3,106
Polio (oral)	2,486	3,121
Measles ("red")	1,706	...
Rubella ("German")	1,767	...
TOTAL	8,494	6,227

a/ For DPT - 3 doses
For Polio - 3 doses with at least a year between the second and third
For Measles and Rubella - 1 dose

b/ For Diphtheria - Pertussis (whooping cough) - Tetanus (lock jaw)

TABLE 5

NUMBER OF INFANTS AND PRESCHOOL CHILDREN RECEIVING SCREENING SERVICES, MATERNAL AND CHILD HEALTH BRANCH
STATE OF HAWAII, CALENDAR YEAR 1978

Type of Service	Number of Children	Children Found To Need Referral	
		Number	Percent
Multiphasic Screening*	4,104	1,138	28
Preschool Screening			
Developmental	3,728	430	12
Hearing	2,056	84	4
Vision	1,867	48	3

*Fiscal Year 1978

TABLE 6

UNDUPLICATED COUNT OF CHILDREN RECEIVING PHYSICIANS' SERVICES FROM CRIPPLED CHILDREN SERVICES BRANCH BY NEW & OLD CASES & AGE

STATE OF HAWAII, FISCAL YEAR 1977-78

Type	Total	Age of Child in Years						
		Under 1	1-4	5-9	10-14	15-17	18-20	Unknown
Total	2,899	93	741	800	685	360	215	5
New Cases	799	93	313	200	116	57	15	5
Old Cases	2,100	-	428	600	569	303	200	-

TABLE 7

STAFF SERVICES PROVIDED BY CRIPPLED CHILDREN SERVICES BRANCH BY PROGRAM a/

STATE OF HAWAII, FISCAL YEAR 1977-78

Service b/	Total
Occupational Therapy	81
Physical Therapy	144
Speech/Hearing	542
Social Work	783
Public Health Nursing	156

a/ Includes Jefferson Orthopedic Unit
b/ Staff services includes such functions as evaluation, consultation, treatment sessions, home visits, collateral visits and contacts, health education, nursing care, supervision of medication, referrals, assessment of growth, health and environmental and arrangements for medical follow-up.

TABLE 8

DISTRIBUTION OF CRIPPLED CHILDREN SERVICES BY DIAGNOSTIC GROUP AND AGE OF CHILD STATE OF HAWAII, FISCAL YEAR 1977-78

DIAGNOSTIC GROUP	TOTAL	NUMBER OF CONDITIONS IN CHILDREN RECEIVING PHYSICIAN SERVICES							
		Type of Case		Age of Child in Years					
		New	Old	Under 1	1 - 4	5 - 9	10 - 14	15 - 17	18 - 21
	3,342	865	2,477	103	849	934	809	424	223
Arthritis	6	2	2	-	1	2	2	-	1
Asthma	138	34	104	3	24	48	45	11	7
Allergy	3	-	3	-	1	-	1	1	-
Blood Disorders	5	2	3	-	2	2	-	-	1
Cerebral Palsy	85	15	70	1	24	28	20	9	3
Cleft Lip and Palate	266	42	224	18	78	80	45	27	18
Epilepsy	244	48	196	3	52	53	69	42	25
Rheumatic Heart	162	25	137	-	1	18	52	55	36
Congenital Heart	448	84	364	39	118	111	105	44	31
Other Heart Disease	179	94	85	11	58	54	30	16	10
Rheumatic Fever	141	34	107	-	1	25	71	31	13
Dental Disorders	43	5	38	-	1	7	21	11	3
Maternal Disorders	22	3	19	1	4	4	13	-	-
Hearing and Ear Conditions	785	223	562	-	153	324	209	75	24
Other Neurological	38	12	26	1	13	6	8	7	3
Gastro-Intestinal	11	5	6	4	6	1	-	-	-
Genito-Urinary	15	4	11	1	5	2	3	1	3
Orthopedic	246	43	203	9	57	56	61	42	21
Plastic	18	4	14	1	2	3	6	3	3
Speech	254	113	141	1	157	60	18	14	4
Respiratory	9	3	6	-	4	2	1	1	1
Spina Bifida & Meningocele	39	5	34	3	14	6	6	6	4
Visual & Eye Conditions	58	16	42	-	30	12	6	8	2
Deferred Diagnosis	47	30	17	3	20	12	7	5	-
Examined - No abnormalies	24	12	12	2	12	5	2	2	1
Learning Disorders	3	-	3	-	-	2	-	1	-
Miscellaneous	53	7	46	2	11	11	8	12	9

TABLE 9

TOTAL NUMBER OF CHILDREN SERVED BY PROVIDERS OF SERVICES INFANT AND CHILD DEVELOPMENT CENTERS COMMUNITY SERVICES FOR THE DEVELOPMENTALLY DISABLED STATE OF HAWAII, FISCAL YEAR 1977-78

PROVIDER	NUMBER OF CHILDREN SERVED
Easter Seal Society of Kauai	35
Easter Seal Society of Hawaii County	81
Easter Seal Society of Maui	134
Easter Seal Society of Oahu (Sultan Easter Seal School)	75
Hawaii Association for Retarded Citizens	45
Kona Infant Development Program	36
Neighborhood Infant Development Program	90
Leeward Infant Development Program	84
Wahiawa Infant Development Program	55
Aina Haina Child Development Center	35
Leeward Child Development Center	30
Wahiawa Child Development Center	48
Leahi Intensive Training Center	15
TOTAL	763

The above figures reflect the unduplicated number of children served during the year and are not the enrollment figures for each month. A child may enroll in a program and after one month may leave the State, move away, drop out or after a short stay be referred to another more appropriate program.

TABLE 10

HEALTH ROOM UTILIZATION BY TYPE OF VISIT AND DISPOSITION

SCHOOL HEALTH SERVICES BRANCH

State of Hawaii, FY 1976-78

Type of Visit and Disposition	Fiscal Year		
	1975-76	1976-77	1977-78
Total Visits to Health room	300,794	357,428	535,021
Total Visits to Health room for illness	117,262	135,470	218,587
Total Visits to Health room for injury	136,925	166,633	237,996
Total Visits to Health room for medication	14,217	18,453	28,347
Total Visits to Health room for TLC	6,937	6,021	7,848
Total Visits to Health room for nonhealth	25,608	29,878	40,885
Total sent home	52,856	58,317	96,971
Total returned to class	241,795	289,523	427,600
Total remained in health room	6,123	7,122	10,450

TABLE 11

CHRONIC DEFECT CONDITIONS FOUND IN CHILDREN EXAMINED BY AGE GROUP

SCHOOL HEALTH BRANCH
State of Hawaii, Fiscal Year 1977-78

CONDITION	Total	AGE		
		5 - 9 Yrs.	10 - 14 Yrs.	15 - 19 Yrs.
Allergies	6,175	2,257	2,699	1,219
Arthritis	63	29	24	10
Asthma	4,225	1,433	1,796	996
Blood Disorder	218	130	61	27
Cardiac	860	369	298	193
Cerebral Palsy	81	24	38	19
Cystic Fibrosis	11	2	3	6
Cleft Lip/Palate	70	41	25	4
Diabetes	146	46	60	40
Emotional/Behavior	249	114	97	38
Epilepsy (Seizures)	518	207	197	114
Eye Problems	2,847	755	1,327	765
Genito-Urinary Disorders	89	47	28	14
Hearing Disorders	2,992	1,135	1,311	546
Hyperactive	90	50	34	6
Hypertension	53	18	15	20
Kidney Disorders	136	43	64	29
Learning Disability	480	164	276	40
Neoplasm (Ca/Leukemia)	36	12	16	8
Mental Retardation	466	96	215	155
Muscular Dystrophy	15	5	9	1
Obesity (20%)	1,025	301	551	173
Orthopedic	681	212	281	188
Otitis Media/Mastoiditis	292	171	108	13
Rheumatic Fever/RHD	201	46	103	52
Scoliosis	21	0	9	12
Skin/Dermatitis	182	82	69	31
Speech Problems	1,340	886	373	81
Ulcer	30	4	11	15
Total	23,592	8,679	10,098	4,815

TABLE 12

REFERRALS TO SCHOOL NURSES FOR FOLLOW-UP BY DISTRICT AND GRADE LEVEL

SCHOOL HEALTH BRANCH
State of Hawaii, Fiscal Year 1977-78

District	Grade Level		
	Elementary	Intermediate	High School
Oahu	3,712	767	688
Kauai	196	52	190
Maui	365	83	86
Hawaii	738	268	300
Total	5,011	1,170	1,264

TABLE 13

ADMINISTRATION OF MEDICATION BY TYPE OF CONDITION AND TYPE OF MEDICATION

SCHOOL HEALTH BRANCH

State of Hwaii, FY 1977-78

Type of Condition	Type of Medication	No. of Cases
Hyperactive (Learning Disability)	Ritalin	160
	Other	16
Asthma	Marax	59
	Choledryl	13
	Slophyllin	36
	Elixophyllin	42
	Quibron	1
	Other	94
Allergy	Benadryl	87
	Other	60
Infection	Antibiotic/Penicillin	44
Strep Infection	Antibiotic/Penicillin	145
Other	Dilantin/Seizure	13
	Dimetab	20
	Miscellaneious	168
Total		970

TABLE 14

VISION CONSERVATION
SCHOOL HEALTH BRANCH
FISCAL YEAR 1977-78

Type of School, Number of Schools, and Type of Examiner	Total Screened	Number Referred for Follow-Up	Percent Referred	Number of Completed Referrals	% of Completed Referrals	Number of Deficit Finding (Medically confirmed)	% Def. Finding (Med. confirmed) of Completed Referrals	% of Def. Finding (Med. confirmed of number screened)	% of Over Referral*
Public Schools (184 schools by technician)	99,822	7,531	7.5	5,237	69.5	4,468	85.3	4.5	14.7
Public Schools (8 schools by health aide)	3,165	126	4.0	90	72.0	83	92.0	3.0	8.0
Private & Parochial Schools (9 schools by technician)	1,225	82	6.7	57	69.5	53	93.0	4.3	7.0
Preschool & Day Care Centers (147 schools by technician)	6,760	293	4.3	156	53.2	94	60.2	1.4	39.8
Private & Parochial Schools (16 schools by PHNs)	1,827	200	10.9	111	55.5	90	81.0	4.9	19.0
GRAND TOTAL	112,799	8,232	7.3	5,651	68.6	4,788	84.7	4.2	15.3

* Percent over referral rate based on the number of completed (medically confirmed) referrals.

TABLE 15

HEARING CONSERVATION
SCHOOL HEALTH BRANCH
FISCAL YEAR 1977-78

Type of School and Geographic Area	Total Number Screened	No. Referred	% Referred	No. of Completed Referrals	% of Completed Referrals	No. of Deficit Findings (Medically Confirmed)	% Def. Finding (Med. confirmed) of Completed Referrals	% of Def. Finding (Med. confirmed) of number screened	% of Over Referrals*
Island Preschools	3,705	147	4%	107	73%	94	88%	3%	12%
Island Private/ Parochial Schools	10,019	223	2%	169	76%	150	89%	1%	11%
Dept. of Education	64,089	2,955	5%	2,031	69%	1,894	93%	3%	7%
Oahu	49,902	2,264	5%	1,558	69%	1,458	94%	3%	6%
Hawaii	6,868	350	5%	249	71%	231	93%	3%	7%
Maui	4,529	261	6%	170	65%	152	89%	5%	11%
Kauai	2,790	80	3%	54	67%	53	98%	2%	2%
TOTAL	77,813	3,325	5%	2,307	69%	2,138	93%	3%	7%

* Percent over referral rate based on the number of completed (medically confirmed) referrals.

TABLE 16

TYPE AND PERCENTAGE DISTRIBUTION OF HEARING LOSS BY GRADE LEVEL HEARING CONSERVATION PROGRAM, STATE OF HAWAII, FISCAL YEAR 1977-78 1/

Type of Hearing Loss	TOTAL	GRADE LEVEL														
		PRE 2/	K	1	2	3	4	5	6	7	8	9	10	11	12	SP ED 3/
No. completed referrals	2307	115	404	171	286	108	85	218	109	86	279	87	101	133	19	102
% conductive	57%	80%	80%	74%	66%	53%	60%	55%	51%	49%	37%	38%	32%	26%	21%	57%
% sensorineural	30%	4%	10%	16%	21%	30%	24%	30%	35%	36%	52%	49%	56%	63%	79%	24%
% mixed	5%	4%	4%	3%	5%	11%	2%	6%	9%	7%	5%	8%	10%	1%	0%	7%

1/ Based on medically confirmed referrals
2/ Preschools
3/ Special Education Classes

TABLE 17

OCCUPATIONAL THERAPY SERVICES BY TYPE OF EVALUATION, TYPE OF SERVICE BY DIAGNOSIS, TYPE OF CONTACT AND GEOGRAPHIC AREA

Occupational Therapy Program, State of Hawaii, Jan. - June, 1978

Disposition of Referrals	TOTAL	Total Oahu	OAHU				HAWAII	KAUAI
			HONOLULU DISTRICT	WINDWARD DISTRICT	CENTRAL DISTRICT	LEEWARD DISTRICT		
No. of Referrals Received	306	242	47	75	66	54	34	30
No. Evaluated	233	191	33	75	41	42	18	24
No. Received Therapy Services	149	132	21	62	14	35	6	11
No. Received Consultation Services	70	49	12	5	27	5	8	13
No. Need but Not Serviced	14	10	0	8	0	2	4	0
No. Not Evaluated	73	51	14	0	25	12	16	6
Service by Diagnosis: TMR	97	81	22	27	13	19	6	10
EMR	45	41	15	17	0	9	4	0
Ortho	8	5	1	0	3	1	1	2
LD	44	43	10	14	6	13	0	1
SMH	32	20	5	5	5	5	5	7
Others	47	41	9	1	18	13	2	4
Contacts for: Evaluation	422	274	48	86	58	82	38	109
Consultation	303	261	40	167	8	46	3	39
Treatment	3,167	2,788	1,101	1,439	28	220	200	179
Coordination	279	179		5	22	152	3	97
Parent Conference	38	28	5	18	5		5	5
Staff Conference	84	62	3	23	4	32	9	13

TABLE 18

Services by Honolulu District Therapist

Physical Therapy Program, State of Hawaii, April - June, 1978

SCHOOL DISTRICT	No. of Children Referred	No. of Children Evaluated	No. Diagnosed as Needing P.T. Services	NUMBER OF CHILDREN IN THERAPY		Services by District Therapist to children established as Handicapped						No. of Evaluation Contacts	No. of Consultation Contacts	No. of Treatment Contacts	No. of Parent Conferences	No. of Staff Conferences	No. of Coordination Contacts
				Evaluation by District P.T.	Evaluation by Other P.T.	MR		Orth.	LD	SMH	Others						
						T	E										
HONOLULU	23	21	14	14	--	1	-	6	2	5	11	35	49	107	8	2	78

MR: mentally retarded
T: trainable
E: educable

Orth.: orthopedically handicapped
LD : learning disability

SMH: severely multiply handicapped

Services to Severely Multiply Handicapped Students by Number and Type of Contacts Physical Therapy Program, April - June, 1978

SCHOOL DISTRICT	NUMBER OF STUDENTS	NUMBER OF EVALUATION CONTACTS	NUMBER OF CONSULTATION CONTACTS	NUMBER OF TREATMENT CONTACTS	NUMBER OF PARENT CONFERENCES	NUMBER OF STAFF CONFERENCES	NUMBER OF COORDINATION CONTACTS
HONOLULU	5	11	32	87	3	2	17

Table 19

LEARNING DISABILITY CLINIC
State of Hawaii

DISPOSITION OF CASES BY AGE & SEX - FY 1977-78

AGE GROUP	SEX	LD CLASS	MRE CLASS	MRT CLASS	EH CLASS	REG. PLACEMENT	REG. PLACEMENT WITH HELP	MENTAL HEALTH	CASEWORK	NURSERY SCHOOL	VAR. CLUB SCH	RETENTION	OTHER	RE-EVALUATION	TOTAL TESTED	NO TESTING	TOTAL REFERRED
0-5	M	17	1	1	-	7	14	1	-	-	2	4	12	2	61	-	61
	F	11	1	1	-	1	7	-	1	-	-	2	5	-	29	-	29
Subtotal		28	2	2	-	8	21	1	1	-	2	6	17	2	90	-	90
6-8	M	82	4	-	-	9	29	6	-	-	3	2	4	-	139	5	144
	F	25	1	-	-	3	19	1	-	-	-	-	-	-	49	3	52
Subtotal		107	5	-	-	12	48	7	-	-	3	2	4	-	188	8	196
9-12	M	18	-	-	-	1	5	1	-	-	-	-	4	1	30	1	31
	F	5	-	1	-	-	7	-	-	-	-	-	4	-	17	1	18
Subtotal		23	-	1	-	1	12	1	-	-	-	-	8	1	47	2	49
Total	M	117	5	1	-	17	48	8	-	-	5	6	20	3	230	6	236
	F	41	2	2	-	4	33	1	1	-	-	2	9	-	95	4	99
GRAND TOTAL		158	7	3	-	21	81	9	1	-	5	8	29	3	325	10	335

Table 20

LEARNING DISABILITY CLINIC
State of Hawaii

DISPOSITION OF CASES BY REFERRAL SOURCE - FY 1977-78

REFERRAL SOURCE	LD CLASS	MRE CLASS	MRT CLASS	EH CLASS	REG. PLACEMENT	REG. PLACEMENT WITH HELP	MENTAL HEALTH	CASEWORK	NURSERY SCHOOL	VAR. CLUB SCH	RETENTION	OTHER	RE-EVALUATION	TOTAL TESTED	NO TESTING	TOTAL REFERRED
DOE - Honolulu District	53	-	-	-	4	17	1	-	-	-	2	1	-	78	2	80
Central District	2	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Leeward District	9	-	-	-	2	11	-	-	-	-	-	-	-	22	-	22
Windward District	22	-	-	-	3	7	3	-	-	-	-	2	-	37	1	38
Private School	4	-	-	-	1	7	2	-	-	-	-	2	-	16	-	16
Physician	8	1	-	-	1	4	-	1	-	-	-	1	-	16	1	17
Oahu Preschool	2	-	-	-	-	2	-	-	-	-	-	1	-	5	-	5
Preschool Screening	6	-	-	-	2	5	1	-	-	-	4	3	1	22	-	22
Parent	15	1	-	-	2	16	1	-	-	-	1	12	-	48	4	52
Neighbor Island	12	1	2	-	3	4	1	-	-	-	-	7	-	30	1	31
Neighbor Island Preschool	4	1	-	-	-	1	-	-	-	-	-	-	1	7	-	7
Department of Health	8	-	1	-	1	2	-	-	-	2	-	1	1	16	-	16
Others	3	1	-	-	-	1	-	-	-	1	-	-	-	6	1	7
Subtotal	148	5	3	-	19	77	9	1	-	3	7	30	3	305	10	315
Re-Eval	10	2	-	-	1	5	-	-	-	2	-	-	-	20	-	20
GRAND TOTAL	158	7	3	-	20	82	9	1	-	5	7	30	3	325	10	335

COMMUNICABLE DISEASE DIVISION

SUMMARY

Rubella (German Measles):

Because of the rubella epidemic in 1977, primarily in young adults, all babies born from October 1978 through April 1979 were tested for evidence of rubella virus infection. There have been no reports of suspected congenital rubella syndrome in newborns and approximately 7,000 cord blood specimens have been tested by Center for Disease Control (CDC) with negative results for evidence of fetal infection. Since the 1977 epidemic, rubella morbidity has fallen to less than 20 cases per year. The program highlight of the year was passage of Act 143/79 that will require premarital testing for susceptibility to rubella in all female applicants for the marriage license after July 1, 1979. This legislation was designated to reduce the risk of congenital rubella syndrome in the State of Hawaii.

Salmonellosis:

Salmonella surveillance, especially of hog viscera products, has continued but has been hampered by the continued vacancy of the State Public Health Veterinarian. There is new evidence that *S. weltevreden*, a species not associated with pork products, may be transmitted by water. This same species of salmonella continues to be found in aquaculture samples. The main problem for the program is the lack of research resources.

School Immunization:

During the fifth year since passage of Act 51/74, the effect of the compulsory school immunization program is a clear success and has received national recognition. Program emphasis this year has shifted toward the immunization of pre-school children. However, the program is clearly limited by data processing resources.

Venereal Diseases:

For the first time in over 20 years, Hawaii recorded a decrease in gonorrhea morbidity over the previous year. The number of gonorrhea cases totaled 3,409, representing a rate of 380 cases/100,000 population and a 20 percent decrease over last year. Seventy-three percent of all cases occurred in the 15-29 age group. Surveillance of penicillinase producing *Neisseria gonorrhoeae* (PPNG) continued in the State of Hawaii. Of the approximately 450 cases imported into the United States since November 1976, fifty-eight were reported from Hawaii. Almost all of these could be documented as importations from Southeast Asia and there is no evidence in Hawaii, or the other 49 states of epidemic spread. All cases have been cured by alternative antibiotics. Thus far, we have been able to contain the further spread of PPNG in Hawaii through aggressive epidemiology and active surveillance. Early infectious syphilis cases (85) remain at a fairly low level. As in previous years, most syphilis cases occur in male homosexuals.

TABLE 1
NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES
STATE OF HAWAII, 1974, 1975, 1976, 1977, and 1978

Disease	1974		1975		1976		1977		1978	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Total	12,515	19	14,713	28	15,377	18	14,198	24	11,079	16
Amebiasis	5	-	9	-	24	-	12	-	13	-
Brucellosis (Undulant fever)	-	-	-	-	-	-	-	-	-	-
Chancroid	4	-	5	-	4	-	1	-	-	-
Chickenpox	769	1	2,113	1	1,047	1	948	-	685	-
Conjunctivitis, infectious	20	-	31	-	2	-	23	-	10	-
Diphtheria	-	-	-	-	1	-	-	-	-	-
Encephalitis, primary & post-infectious	3	1	5	1	1	1	2	-	1	-
Gonorrhea	2,923	-	3,126	-	3,591	-	4,256	-	3,409	-
Hepatitis, infectious	138	5	239	4	132	2	142	5	159	2
Hepatitis, serum	83	-	83	-	96	-	83	-	65	-
Hepatitis, unspecified	36	-	13	-	12	-	14	-	29	-
Hookworm disease (Ancylostomiasis)	105	-	94	-	133	-	107	-	101	-
Influenza	584	1	728	3	2,624	4	585	1	352	-
Leprosy	29	-	30	1	34	-	27	-	31	1
Leptospirosis (Weil's disease)	8	-	4	-	9	-	6	-	17	-
Lymphogranuloma venereum	2	-	-	-	-	-	-	-	-	-
Malaria a/	5	-	3	1	1	-	2	-	22	-
Measles (Rubeola)	68	-	64	-	11	-	51	-	9	-
Meningitis, aseptic & viral	76	-	81	-	66	-	61	-	78	-
Meningitis, bacterial (All types) b/	29	2	29	1	30	3	22	7	16	3
Meningitis, meningococcal	(3)	-	(2)	-	(6)	-	(4)	(1)	(3)	-
Meningitis, unspecified	2	3	3	3	-	4	1	4	-	1
Mononucleosis, infectious	73	-	75	-	70	-	63	-	46	1
Mumps	80	-	60	-	49	-	42	-	38	-
Pertussis (Whooping cough)	1	-	1	-	2	-	-	-	1	-
Poliomyelitis	-	-	-	-	-	-	-	-	1	-
Rubella (German measles)	19	-	22	-	22	-	438	-	13	-
Rubella, congenital syndrome	-	-	2	1	-	-	-	-	-	-
Salmonellosis	599	-	543	-	475	-	603	1	485	-
Scarlet fever & other strep infections	6,309	-	6,482	-	5,905	-	5,919	-	4,959	-
Shigellosis	97	-	137	-	182	-	113	-	131	-
Syphilis, primary & secondary	34	-	64	-	99	-	46	-	51	-
Syphilis, early latent	21	-	50	-	58	-	37	-	34	-
Syphilis, late & late latent	20	-	20	-	24	-	6	-	20	-
Tetanus	1	-	1	-	-	-	-	-	-	-
Trichinosis	2	-	-	-	-	-	-	-	-	-
Tuberculosis	364	6	591	12	665	3	584	6	290	8
Typhoid fever	4	-	4	-	7	-	3	-	11	-
Typhus fever, endemic	2	-	1	-	1	-	1	-	2	-

a/ Malaria acquired outside the State

b/ Includes meningitis, meningococcal

TABLE 2

SELECTED COMMUNICABLE DISEASE RATES PER 100,000 POPULATION IN STATE OF HAWAII 1974-1978

Year	1974	1975	1976	1977	1978
Population	846,869	864,886	886,600	894,700	896,600
	Rates Per 100,000 Population				
All Communicable Diseases	1,474	1,701	1,734	1,587	1,236
Gonorrhea	345	361	405	476	380
Communicable Disease (Exclusive of Venereal Disease)	1,119	1,324	1,308	1,101	844
Scarlet Fever & Other Strep Infections	745	750	666	662	553
Influenza	69	84	296	65	39
Chickenpox	91	244	118	106	76
Mumps	09	07	06	05	04
Rubella (German Measles)	02	03	03	49	01
Measles (Rubeola)	08	07	01	06	01

TABLE 3

COMMUNICABLE DISEASE REPORT BY GEOGRAPHIC AREAS STATE OF HAWAII, 1978

Disease	State		TOTAL CASES a/						Military Active Duty
	Number	Rate b/	Hawaii	Oahu	Kauai	Lanai	Maui	Molokai	
Total	11,079	1,235.7	759	9,217	633	2	465	3	805
Amebiasis	13	1.5	1	12	-	-	-	-	-
Brucellosis (Undulant fever)	-	-	-	-	-	-	-	-	-
Chancroid	-	-	-	-	-	-	-	-	-
Chickenpox	685	76.4	33	555	20	-	76	1	1
Conjunctivitis, infectious	10	1.1	-	6	-	-	4	-	-
Diphtheria	-	-	-	-	-	-	-	-	-
Encephalitis, primary & post-infectious	1	0.1	-	1	-	-	-	-	1
Gonorrhea	3,409	380.2	94	3,160	48	1	105	1	635 c/
Hepatitis, infectious	159	17.7	10	141	2	-	5	1	71
Hepatitis, serum	65	7.3	3	57	4	-	1	-	11
Hepatitis, unspecified	29	3.2	1	25	2	-	1	-	6
Hookworm disease (Ancylostomiasis)	101	11.3	1	100	-	-	-	-	1
Influenza	352	39.3	-	341	9	-	2	-	-
Leprosy	31	3.5	1	27	1	1	1	-	1
Leptospirosis (Weil's disease)	17	1.9	13	1	3	-	-	-	-
Lymphogranuloma venereum	-	-	-	-	-	-	-	-	-
Malaria c/	22	2.5	1	19	1	-	1	-	18
Measles (Rubeola)	9	1.0	1	8	-	-	-	-	-
Meningitis, aseptic & viral	78	8.7	6	69	3	-	-	-	5
Meningitis, bacterial (All types) d/	16	1.8	6	9	1	-	-	-	-
Meningitis, meningo.	(3)	(0.3)	-	(3)	-	-	-	-	-
Meningitis, unspec.	-	-	-	-	-	-	-	-	-
Mononucleosis, infec.	46	5.1	2	43	-	-	1	-	21
Mumps	38	4.2	4	28	2	-	4	-	1
Pertussis (Whooping cough)	1	0.1	-	1	-	-	-	-	-
Poliomyelitis	1	0.1	-	1	-	-	-	-	-
Rubella (German measles)	13	1.5	-	12	-	-	1	-	-
Rubella, congenital syndrome	-	-	-	-	-	-	-	-	-
Salmonellosis	485	54.1	6	402	20	-	57	-	5
Scarlet fever & other streptococcal inf.	4,959	553.1	541	3,731	505	-	182	-	-
Shigellosis	131	14.6	2	118	1	-	10	-	3
Syphilis, primary & secondary	51	5.7	6	43	1	-	1	-	7
Syphilis, early latent	34	3.8	3	29	2	-	-	-	9
Syphilis, late & late latent	20	2.2	3	16	1	-	-	-	7
Tetanus	-	-	-	-	-	-	-	-	-
Trichinosis	-	-	-	-	-	-	-	-	-
Tuberculosis	290	32.3	21	251	7	-	11	-	-
Typhoid fever	11	1.2	-	11	-	-	-	-	2
Typhus fever, endemic	2	0.2	-	-	-	-	2	-	-

a/ Resident cases (includes military on active duty)
b/ Number per 100,000 total population (896,600)
c/ Includes military and military dependents
d/ Malaria acquired outside the State
e/ Includes meningitis, meningococcal

TABLE 4

VENEREAL DISEASE CASES REPORTED TO THE DEPARTMENT OF HEALTH BY DIAGNOSIS AND SOURCE OF REPORT

STATE OF HAWAII 1978

Type of Disease		Total	Private Physicians, Hospitals and Institutions	Public Clinics, Hospitals and Institutions	Military
Total Cases	Number	3,514	1,110	1,746	658
	Percent	100	32	50	18
Syphilis:					
Primary & Secondary		51	19	25	7
Early Latent		34	10	15	9
Late and Late Latent		20	11	2	7
Gonorrhea		3,409	1,070	1,704	635
Other Venereal Disease		0	—	—	—

TABLE 5

TOTAL PRIMARY AND SECONDARY SYPHILIS CASES BY AGE
STATE OF HAWAII 1974 - 1978

Age in Years	1974	1975	1976	1977	1978
Total All Ages	34	64	99	46	51
0 - 14	—	—	—	—	—
15 - 19	3	6	8	4	3
20 - 24	4	13	29	15	14
25 - 29	7	12	25	12	11
30 - 34	9	15	19	5	7
35 - 39	3	5	10	3	8
40 - 44	4	3	4	1	5
45 - 49	2	6	3	1	1
50 & over	2	4	1	5	—
Unknown	—	—	—	—	2

TABLE 6

TOTAL GONORRHEA CASES BY AGE
STATE OF HAWAII 1974 - 1978

Age in Years	1974	1975	1976	1977	1978
Total All Ages	2,923	3,126	3,591	4,256	3,409
0 - 14	17	27	16	20	11
15 - 19	576	649	719	733	510
20 - 24	1,209	1,279	1,360	1,633	1,269
25 - 29	549	646	798	940	737
30 - 34	249	213	339	410	386
35 - 39	99	103	128	190	172
40 - 44	39	56	73	96	90
45 - 49	24	22	36	38	32
50 & over	27	39	39	65	55
Unknown	134	92	83	131	147

TABLE 7

NUMBER AND RATE PER 100,000 POPULATION OF TOTAL REPORTED GONORRHEA CASES

STATE OF HAWAII, 1968 - 1978

Year	15 - 19 Years			20 - 24 Years			25 - 29 Years			All Ages		
	Cases	Population*1/	Rate	Cases	Population 1/	Rate	Cases	Population1/	Rate	Cases	Population1/	Rate
1968	103	67,895	151.7	415	74,535	556.8	131	55,925	234.2	883	734,456	120.2
1969	147	69,797	210.6	480	78,120	614.4	176	57,649	305.3	996	750,228	132.8
1970	264	72,278	365.3	712	82,049	867.8	223	59,819	372.8	1,494	773,212	193.2
1971	383	74,380	514.9	888	84,435	1,051.7	326	61,559	529.6	1,975	795,702	248.2
1972	365	76,293	478.4	925	86,604	1,068.1	363	63,141	574.9	2,080	816,149	254.9
1973	482	77,813	619.4	987	88,133	1,119.9	488	64,311	758.8	2,408	832,147	289.4
1974	576	79,190	727.4	1,209	89,748	1,347.1	549	65,467	838.6	2,923	846,869	345.2
1975	649	77,048	842.3	1,279	94,221	1,357.4	646	68,951	936.9	3,126	864,900	361.4
1976	719	82,400	872.6	1,360	99,900	1,361.4	798	82,600	966.1	3,591	886,621	405.0
1977	733	83,200	881.0	1,633	100,810	1,619.9	940	83,400	1,127.1	4,256	894,700	475.7
1978	510	86,073	592.5	1,269	104,902	1,209.7	737	88,763	830.3	3,409	896,600	380.2

* Population data extrapolated by percent distribution from 1960 and 1970 census of Hawaii and estimated total resident population as of July 1 from R & S Report, Issue No. 5. Population includes Armed Forces and their dependents in Hawaii, and residents temporarily absent, excludes visitors present.

1/ Data shown only for computational convenience and not intended to imply accuracy beyond three significant figures.

The reported rates of Gonorrhea by selected age groups in Hawaii, according to their numerical ranking order are 1) 20 - 24 years, 2) 25 - 29 years and 3) 15 - 19 years.

Leprosy

In 1978, the number of newly diagnosed leprosy cases totaled 31. This compared with 27 in 1977 and an average of 30.2 for the five-year period 1974 through 1978. Thus, it appears that the downward trend which began in 1974 has leveled off.

Of the 31 new cases discovered in 1978, 28 were "imported" while 3 were found in persons born in Hawaii. Of the 28 whose place of birth was other than Hawaii, 16 came from the Philippines, 10 from Samoa, 1 from Fiji and 1 from the continental United States. The 3 from Hawaii in 1978 compared with an average of 3.6 for the five-year period 1974 through 1978. We are still hoping for the day when no new cases will be found among persons born in Hawaii but that may not happen for awhile yet.

Since early 1974, the policy followed by the program is to place all newly discovered cases of leprosy under outpatient treatment unless severe reactions or complications dictate that short term hospitalizations are indicated until the disease is stabilized. This is progress indeed when compared with the long years of institutional care which were required for leprosy patients not too many years ago.

The program maintains surveillance over contacts of known cases and arranges for periodic examinations of these contact to be alert to any outbreak of the disease that might develop in this at-risk population.

Inpatient care is continued for those who require treatment and care for their chronic problems. Those requiring this type of care are mostly the older long-time patients who have many leprosy related problems from residual effects of the disease which developed before the availability of the effective drugs that are used currently to treat this disease. Nearly all of these chronic care patients are residents of Kalaupapa Settlement who by law are now permitted to live out the rest of their lives over there, if they so wish. The inpatient facility on Oahu, Hale Mohalu at Leahi, is operated primarily to provide medical support for Kalaupapa and to care for any outpatient who develops a need for temporary inpatient care because of severe leprous reactions or complications.

New drugs and treatment methods have succeeded in bringing under control practically all the cases that are on the case register. However, it is important that these patients continue to take their prescribed medications faithfully as directed. The fact that since early 1974 no new patients have been added to the inpatient roster on a "permanent" basis, indicates that in time the inpatient program will be phased out through natural attrition of those who are currently in the program. However, this process will require many more years to work its way through the remaining chronic care patients. Meanwhile, it is hoped that medical science will soon find an effective way to bring about improved control of the disease in those areas where it is widespread.

If large scale reduction of cases in endemic areas could be achieved, especially in the Philippines and Samoa, Hawaii should also experience a substantial reduction in the number of imported cases it receives each year from those areas. This in turn would open up the possibility of elimination of the disease from Hawaii at some point in time in the future.

TABLE 1

TOTAL LEPROSY PATIENTS REGISTERED BY REGISTER STATUS AND YEAR STATE OF HAWAII, 1974-1978

Register Status	1974	1975	1976	1977	1978
Total cases on register January 1	379	393	405	421	421
New cases added during the year	29	30	34	27	31
Formerly diagnosed cases returned to register	5	5	6	3	2
Removed during year	20	23	24	30	17
Deaths	4	11	6	5	5
Left the State	10	10	15	14	10
Discharged from further surveillance	6	2	3	11	2
Total cases on register December 31	393	405	421	421	437

TABLE 2

LEPROSY PATIENTS REQUIRING INSTITUTIONAL CARE BY REGISTER STATUS AND YEAR STATE OF HAWAII, 1974-1978

Register Status	1974	1975	1976	1977	1978
Total patients requiring institutional care January 1	34	13	5	4	4
Added during year	3	-	-	-	-
New admissions	3	-	-	-	-
Reactivated	-	-	-	-	-
Diagnosed cases returned to register	-	-	-	-	-
Removed during year	24	8	1	-	1
Deaths	-	1	-	-	-
Granted medical release	23	7	1	-	1
Left the State	1	-	-	-	-
Total patients requiring institutional care December 31	13	5	4	4	3

TABLE 3

TOTAL CASES OF LEPROSY REGISTERED BY TYPE, LOCATION AND YEAR STATE OF HAWAII, 1974-1978

Type and Location	1974	1975	1976	1977	1978
Total cases on register December 31	393	405	421	421	437
Medically released	380	400	417	417	434
At home	244	264	284	288	304
Kalaupapa	135	135	131	128	127
Hale Mohalu	1	1	2	1	3
Institutional Care Required	13	5	4	4	3
Kalaupapa	8	1	-	-	-
Hale Mohalu	5	4	4	4	3

TABLE 4

NEW CASES OF LEPROSY REPORTED BY SOURCE AND YEAR
STATE OF HAWAII, 1974-1978

Source of Report	1974	1975	1976	1977	1978
Total Reported	29	30	34	27	31
Physician	28	28	32	24	31
Private	24	18	21	17	28
Government and Institution	3	9	10	5	2
Division	1	1	1	2	1
Other*	1	2	2	3	-

*Private citizens and the patient himself

TABLE 5

NEW CASES OF LEPROSY BY AGE GROUP AND YEAR
STATE OF HAWAII, 1974-1978

Age in Years	1974	1975	1976	1977	1978
All Ages	29	30	34	27	31
0 - 9	-	2	-	1	1
10 - 19	5	2	7	1	5
20 - 29	12	9	18	10	9
30 - 39	5	5	8	3	6
40 - 49	4	2	3	5	3
50 - 59	2	5	2	1	2
60 - 69	1	3	2	4	5
70 and over	-	2	2	2	-

TABLE 6

NEW CASES OF LEPROSY BY ISLAND OF RESIDENCE AND YEAR
STATE OF HAWAII, 1974-1978

Island	1974	1975	1976	1977	1978
All Islands	29	30	34	27	31
Hawaii	3	2	2	1	1
Oahu	25	24	27	22	27
Maui	-	2	2	2	1
Kauai	-	1	1	2	1
Molokai	1	1	-	-	-
Lanai	-	-	2	-	1

TABLE 7

NEW CASES OF LEPROSY BY COUNTRY OF BIRTH AND YEAR
STATE OF HAWAII, 1974-1978

Country of Birth	Total	1974	1975	1976	1977	1978
All Countries	151	29	30	34	27	31
Hawaii	18	3	4	5	3	3
Philippines	78	19	14	14	15	16
Japan	1	-	-	1	-	-
China	1	-	1	-	-	-
Samoa	42	6	6	13	7	10
Micronesia	3	1	1	1	-	-
United States	2	-	-	-	1	1
Other*	6	-	4	-	1	1

*Fiji - 1(78), India - 1(75), Tonga - 1(77), Vietnam - 3(75)

SUMMARY 1978

The reportable tuberculosis cases for this 1978 annual statistical report are based in accordance with Diagnostic Standards, 1974 edition, effective January 1, 1975. In 1975 through 1977 the reportable cases counted and reported to the United States Public Health Service included registered cases with stable or unstable x-rays with or without positive bacteriology and in which double or triple drug chemotherapy were prescribed. However, in accordance with instructions from the United States Public Health Service the cases counted this year are to be only cases with unstable x-rays with or without positive bacteriology and in which double or triple drugs were prescribed. Therefore, the count this year will reflect a drop in the number of reportable tuberculosis cases when compared with the statistics during the last three years. Also, this method of reporting cases will not be comparable with the statistics in previous years because reactivation cases were not counted in the years prior to 1974 while in 1975 through 1977 they were counted in accordance with the United States Public Health Service standards.

There were 290 tuberculosis cases reported in 1978. The case rate was 32.3 per 100,000 population. Foreign-born persons comprised 72.8 percent of all the cases. Fifty percent of all foreign-born cases had resided in Hawaii one year or less.

TABLE 1

X-RAY SURVEY ACTIVITIES FOR TUBERCULOSIS BY COUNTY
STATE OF HAWAII, 1978

Geographic Area	Total Screening Films Taken	Retake Films Needed	Tuberculosis Cases Added To The Register From X-ray Screening Program					
			Total		Tuberculosis Cases with unstable x-rays		Tuberculosis Cases with stable x-rays	
			Number	Rate*	Number	Rate*	Number	Rate*
State of Hawaii	88,812	2,227	136	1.5	45	.5	91	1.0
County of Honolulu	78,676	1,917	128	1.6	44	.6	84	1.0
Mobile Units	22,773	399	7	.3	2	.1	5	.2
Lanakila Health Center .	55,903	1,518	121	2.2	42	.8	79	1.4
Routine Survey	42,875	1,037	76	1.8	29	.7	47	1.1
Medical Referrals	2,191	93	7	3.2	2	.9	5	2.3
Other Agency Referrals	7,528	271	27	3.6	8	1.1	19	2.5
Extensions of Stay of Non-Immigrant Visas	1,742	43	6	3.4	3	1.7	3	1.7
Tuberculin Testing Program - PHN	1,567	74	5	3.2	-	-	5	3.2
County of Hawaii	10,136	310	8	.8	1	.1	7	.7

*Per 1,000 survey films.
NOTE: Mobile survey x-rays have been discontinued at Counties of Maui and Kauai.

TABLE 2

NUMBER OF CASES INITIATED DOUBLE OR TRIPLE DRUGS
STATE OF HAWAII 1976, 1977 and 1978

Geographic Area of Residence	1976		1977		1978	
	Number	Rate a/	Number	Rate b/	Number	Rate a/
State of Hawaii	665	75.0	584	65.3	625	69.7
County of Honolulu	637	88.7	532	73.7	562	77.8
City of Honolulu	405	115.5	334	94.8	358	100.4
Rest of Oahu	232	63.1	198	53.6	204	55.8
County of Hawaii	15	19.6	30	38.4	34	43.1
County of Maui b/	7	12.2	12	20.0	17	27.7
County of Kauai	6	17.6	10	28.7	12	35.3

a/ Per 100,000 total population.

b/ Includes Kalawao County.

TABLE 3

TUBERCULOSIS CASES REPORTED BY GEOGRAPHIC AREA OF RESIDENCE STATE OF HAWAII, 1978

Geographic Area of Residence	TUBERCULOSIS CASES REPORTED	
	1978	
	Number	Rate a/
State of Hawaii	290	32.3
County of Honolulu	251	34.7
City of Honolulu	159	44.6
Rest of Oahu	92	25.1
County of Hawaii	21	26.6
County of Maui b/	11	17.9
County of Kauai	7	20.6

a/ Per 100,000 total population.
b/ Includes Kalawao County.

TABLE 4

TUBERCULOSIS CASES BY PLACE OF BIRTH AND LENGTH OF RESIDENCE, AND NUMBER OF PERSONS ADMITTED TO HAWAII WITH PERMANENT VISAS STATE OF HAWAII, 1975-1978

Birthplace or Time in Hawaii	1975			1976			1977			1978		
	Number	Percent	Rate a/	Number	Percent	Rate a/	Number	Percent	Rate a/	Number	Percent	Rate a/
Total	338	100.0	39.1	338	100.0	38.1	291	100.0	32.5	290	100.0	32.3
Foreign-Born b/	241	71.3	281.9	225	66.6	256.3	228	78.3	259.7	211	72.8	240.0
1 Year or Less	128	37.9	---	118	34.9	---	120	41.2	---	106	36.6	---
Over 1 year - 2 years	25	7.4	---	15	4.5	---	14	4.8	---	14	4.8	---
Over 2 years - 5 years	19	5.6	---	18	5.3	---	16	5.5	---	19	6.6	---
Over 5 years	66	19.5	---	68	20.1	---	70	24.1	---	63	21.7	---
Unknown Time in State	3	.9	---	6	1.8	---	8	2.7	---	9	3.1	---
Mainland-Born	10	3.0	3.8	28	8.3	11.0	14	4.8	6.4	18	6.2	8.2
Hawaii-Born	84	24.8	16.4	71	21.0	13.0	45	15.5	7.6	56	19.3	9.5
Birthplace Unknown	3	.9	---	14	4.1	---	4	1.4	---	5	1.7	---
U.S. Born Rate (Hawaii + Mainland)	...	...	12.1	...	...	12.0	...	...	7.3	74	25.5	9.1
U.S. National Average Rate	...	...	15.9	...	...	15.0	...	...	13.9	...	...	N/A
Number of Persons Admitted to Hawaii with Permanent Visas c/	4,698		---	5,427		---	4,790		---	6,294		---

a/ Rate - Cases per 100,000 total civilian population; rate for foreign-born, mainland-born and Hawaii-born are estimates.
b/ Foreign-born includes people coming to Hawaii from both American and Western Samoa.
c/ Persons admitted to Hawaii with permanent visas include only individuals whose port of entry is Honolulu.
Note: Cases in this table include only cases with abnormal chest x-ray and/or clinical evidence of current disease.

TABLE 5

TUBERCULOSIS CASES BY LOCATION OF DISEASE AND COUNTY OF RESIDENCE, STATE OF HAWAII, 1978

Location of Disease	State of Hawaii		County of Residence							
			Honolulu		Hawaii		Maui */		Kauai	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	290	100.0	251	100.0	21	100.0	11	100.0	7	100.0
Pulmonary	250	86.2	212	84.5	20	95.2	11	100.0	7	100.0
Extrapulmonary	40	13.8	39	15.5	1	4.8	-	-	-	-
Pleural	6	2.1	6	2.4	-	-	-	-	-	-
Lymphatic	9	3.1	8	3.2	1	4.8	-	-	-	-
Bone and/or Joint	1	.4	1	.4	-	-	-	-	-	-
Genitourinary	6	2.1	6	2.4	-	-	-	-	-	-
Miliary	6	2.1	6	2.4	-	-	-	-	-	-
Meningeal	1	.3	1	.4	-	-	-	-	-	-
Peritoneal	2	.6	2	.8	-	-	-	-	-	-
Other	9	3.1	9	3.5	-	-	-	-	-	-
Site Not Started	-	-	-	-	-	-	-	-	-	-

*/ Includes Kalawao County.

TABLE 6

TUBERCULOSIS CASES BY SOURCE OF REPORT AND COUNTY OF RESIDENCE STATE OF HAWAII, 1978

Source of Report	State of Hawaii		County of Residence							
			Honolulu		Hawaii		Maui */		Kauai	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	290	100.0	251	100.0	21	100.0	11	100.0	7	100.0
Health Department	170	58.6	147	58.5	16	76.2	6	54.5	1	14.3
Private Physician	72	24.8	62	24.7	5	23.8	3	27.3	2	28.6
Tuberculosis Hospital or OPD	23	7.9	17	6.8	-	-	2	18.2	4	57.1
General Hospital or OPD	8	2.8	8	3.2	-	-	-	-	-	-
Tripler Army Hospital or VA	15	5.2	15	6.0	-	-	-	-	-	-
Death Certificate	2	.7	2	.8	-	-	-	-	-	-

*/ Includes Kalawao County.

TABLE 7

TUBERCULOSIS CASES BY REASON FOR EXAMINATION AND COUNTY OF RESIDENCE, STATE OF HAWAII, 1978

Reason for Examination	State of Hawaii		County of Residence							
			Honolulu		Hawaii		Maui */		Kauai	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	290	100.0	251	100.0	21	100.0	11	100.0	7	100.0
Health Department Survey	52	17.9	50	19.9	1	4.8	1	9.1	-	-
Contact & Source Investigation	7	2.4	5	2.0	2	9.5	-	-	-	-
Chest Clinic Follow-up	21	7.2	17	6.8	2	9.5	2	18.2	-	-
Positive Reactor or Converter	3	1.1	2	.8	1	4.8	-	-	-	-
Extension of Stay, Non-Immigrant Visa	4	1.4	4	1.6	-	-	-	-	-	-
Aliens with Waiver of Exludability for Tuberculosis ...	36	12.4	35	13.9	-	-	-	-	1	14.3
Aliens with Tuberculosis Not Considered Active	31	10.7	28	11.2	2	9.5	1	9.1	-	-
Review of Other Visa Films & Evaluation of Foreign-Born	6	2.1	6	2.4	-	-	-	-	-	-
Symptoms or Illness	80	27.6	64	25.4	5	23.8	6	54.5	5	71.4
General Hospital & PMD X-ray Findings	2	.7	1	.4	-	-	1	9.1	-	-
Death Certificate	2	.7	2	.8	-	-	-	-	-	-
Other	32	11.0	24	9.6	8	38.1	-	-	-	-
Unknown	14	4.8	13	5.2	-	-	-	-	1	14.3

*/ Includes Kalawao County.

TABLE 8

TUBERCULOSIS CASES BY AGE, RACE AND SEX
STATE OF HAWAII, 1978

Age Group	All Races			Caucasian		Hawaiian and part Hawaiian		Chinese		Filipino		Japanese		Oceanic Races a/		Korean		Vietnamese		Other	
	Total	Male	Female	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total	290	178	112	14	6	10	6	12	7	91	45	24	14	6	4	9	22	5	2	7	6
0 - 4	3	3	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
5 - 9	4	2	2	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	1
10 - 14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 - 19	9	4	5	-	1	-	-	-	-	2	1	-	1	-	-	-	2	2	-	-	-
20 - 24	19	6	13	-	-	-	-	2	2	1	3	-	-	1	1	1	6	-	-	1	1
25 - 29	28	13	15	-	1	-	-	1	2	5	4	1	1	1	-	2	4	2	1	1	2
30 - 34	24	10	14	1	-	-	-	1	1	3	6	-	-	-	-	4	6	-	1	1	-
35 - 39	13	8	5	1	-	-	-	-	-	6	-	-	1	-	1	-	2	-	-	1	1
40 - 44	14	10	4	-	-	2	1	-	-	7	2	-	-	-	1	-	-	-	-	1	-
45 - 49	15	13	2	-	-	3	-	-	-	9	1	1	-	-	-	-	-	-	-	-	1
50 - 54	39	22	17	3	1	4	2	1	1	12	12	1	1	-	-	-	-	-	-	1	-
55 - 59	30	19	11	2	2	1	-	2	1	11	6	-	1	2	1	1	-	-	-	-	-
60 - 64	22	16	6	1	1	-	1	1	-	11	2	1	2	1	-	1	-	-	-	-	-
65 - 69	23	17	6	2	-	-	1	1	-	7	3	7	1	-	-	-	1	-	-	-	-
70 - 74	21	18	3	2	-	-	-	-	-	9	2	7	1	-	-	-	-	-	-	-	-
75 and Over	24	17	7	1	-	-	1	2	-	7	2	6	4	-	-	-	-	1	-	-	-
Unknown	2	-	2	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-

a/ Oceanic races include only natives of Polynesia, Micronesia and Melenesia: Samoa 7, Truk 1, Tonga 1 and Caroline Islands 1.

TABLE 9

TUBERCULOSIS CASES ON CHEMO RX REMAINING ON THE REGISTER DECEMBER 31, 1978 BY DOMICILE AND SUPERVISING MEDICAL AGENCY AND COUNTY, STATE OF HAWAII

Domicile and Supervising Medical Agency	State of Hawaii		County of Residence							
			Honolulu		Hawaii		Maui */		Kauai	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	276	100.0	240	100.0	26	100.0	4	100.0	6	100.0
In Hospital	19	6.9	18	7.5	-	-	-	-	1	16.7
TB Hospital	11	4.0	10	4.2	-	-	-	-	1	16.7
Tripler Army General Hospital	4	1.5	4	1.7	-	-	-	-	-	-
Other Hospitals	4	1.4	4	1.6	-	-	-	-	-	-
At Home	257	93.1	222	92.5	26	100.0	4	100.0	5	83.3
State Health Department Clinic	177	64.1	142	59.1	26	100.0	4	100.0	5	83.3
Private Physician	9	3.3	9	3.8	-	-	-	-	-	-
TB Hospital OPD	66	23.9	66	27.5	-	-	-	-	-	-
Federal Medical Facilities	5	1.8	5	2.1	-	-	-	-	-	-

*/ Includes Kalawao County

TABLE 10

TUBERCULOSIS CASES ON DOUBLE DRUGS REMAINING ON THE REGISTER DECEMBER 31, 1978 BY LOCATION OF DISEASE AND COUNTY OF RESIDENCE, STATE OF HAWAII

Location of Disease	State of Hawaii		County of Residence							
			Honolulu		Hawaii		Maui */		Kauai	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	276	100.0	240	100.0	26	100.0	4	100.0	6	100.0
Pulmonary	247	89.5	214	89.2	23	88.5	4	100.0	6	100.0
Extrapulmonary	29	10.5	26	10.8	3	11.5	-	-	-	-
Pleural	6	2.2	6	2.5	-	-	-	-	-	-
Lymphatic	11	4.0	9	3.7	2	7.7	-	-	-	-
Bone and/or Joint	-	-	-	-	-	-	-	-	-	-
Genitourinary	5	1.8	5	2.1	-	-	-	-	-	-
Miliary	1	.3	1	.4	-	-	-	-	-	-
Meningeal	-	-	-	-	-	-	-	-	-	-
Peritoneal	-	-	-	-	-	-	-	-	-	-
Other	6	2.2	5	2.1	1	3.8	-	-	-	-
Site Not Stated	-	-	-	-	-	-	-	-	-	-

*/ Includes Kalawao County

TABLE 11

TUBERCULOSIS CASES ON REGISTER BY REGISTER STATUS AND COUNTY OF RESIDENCE, DECEMBER 31, 1978 STATE OF HAWAII

Register Status	State of Hawaii	County of Residence			
		Honolulu	Hawaii	Maui */	Kauai
TB Cases on Register January, 1978.......	4,784	4,435	145	150	54
Added during the year	914	717	79	90	28
Transfers between counties	...	+1	-2	-	+1
Total on Register During the Year	5,698	5,153	222	240	83
Removed During the Year	2,223	2,122	51	28	22
Inactive Over 5 Years	781	735	23	16	7
Diagnosis Rescinded	39	35	3	1	-
Died, Tuberculosis	5	2	-	1	2
Died, Other Causes	52	45	2	4	1
Left State	477	463	7	1	6
Supervision Completed	374	359	10	3	2
Other	495	483	6	2	4
Total Carried Forward, December 31, 1978	3,475	3,031	171	212	61

*/ Includes Kalawao County

TABLE 12

REACTIVATIONS REPORTED BY BACTERIOLOGY, NUMBER OF REACTIVATIONS AND CHEMO HISTORY BY COUNTY, STATE OF HAWAII, 1978

County	Total	Bacteriological History			Number of Reactivations			Chemotherapy History		
		Positive	Negative	Unknown	1	2	3	None	Inadequate	Adequate
Total	29	15	8	6	26	2	1	14	6	9
Honolulu	22	11	7	4	20	1	1	11	4	7
Hawaii	4	3	-	1	4	-	-	-	2	2
Maui */	3	1	1	1	2	1	-	3	-	-
Kauai	-	-	-	-	-	-	-	-	-	-

*/ Includes Kalawao County.

TABLE 13

REACTIVATIONS REPORTED BY AGE, SEX AND COUNTY. STATE OF HAWAII, 1978

Age Group	State of Hawaii			Honolulu		Hawaii		Maui*		Kauai	
	Total	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	29	19	10	13	9	3	1	3	-	-	-
Under 5	-	-	-	-	-	-	-	-	-	-	-
5 - 14	-	-	-	-	-	-	-	-	-	-	-
15 - 24	-	-	-	-	-	-	-	-	-	-	-
25 - 44	5	2	3	2	3	-	-	-	-	-	-
45 - 64	9	6	3	4	3	-	-	2	-	-	-
65 - Over	15	11	4	7	3	3	1	1	-	-	-

*Includes Kalawao County

Note: Includes 8 special readmissions, those cases which were previously registered as quiescent, inactive, presently inactive or activity undetermined, who reactivated for the first time in 1978 and who also are being counted as tuberculosis cases in accordance with U.S. Public Health Service reporting recommendations.

TABLE 14

TUBERCULOSIS DEATHS BY AGE, RACE AND SEX STATE OF HAWAII, 1978

Age Group	All Races			Caucasian		Hawaiian and part Hawaiian		Chinese		Filipino		Japanese	
	Total	Male	Female	M	F	M	F	M	F	M	F	M	F
Total	5	4	1	1	-	-	-	-	-	2	-	1	1
0 - 39	2	2	-	1	-	-	-	-	-	1	-	-	-
40 - 44	-	-	-	-	-	-	-	-	-	-	-	-	-
45 - 49	1	1	-	-	-	-	-	-	-	-	-	1	-
50 - 54	-	-	-	-	-	-	-	-	-	-	-	-	-
55 - 59	-	-	-	-	-	-	-	-	-	-	-	-	-
60 - 64	-	-	-	-	-	-	-	-	-	-	-	-	-
65 - 69	-	-	-	-	-	-	-	-	-	-	-	-	-
70 - 74	-	-	-	-	-	-	-	-	-	-	-	-	-
75 - 79	-	-	-	-	-	-	-	-	-	-	-	-	-
80 - 84	2	1	1	-	-	-	-	-	-	1	-	-	1
85 and Over	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 15

TUBERCULOSIS DEATHS BY TIME CASE WAS REPORTED BY COUNTY
STATE OF HAWAII, 1978

Time Case Was Reported	State of Hawaii	County of Residence				
		Honolulu	Hawaii	Maui	Kauai	Kalawao
Total	5	2	-	1	2	-
After Death	-	-	-	-	-	-
Less than 3 months before death	2	1	-	-	1	-
Two years before death	1	-	-	-	1	-
3 - 4 years before death	2	1	-	1	-	-
5 or more years before death ..	-	-	-	-	-	-

TABLE 16

NUMBER OF TUBERCULOSIS DEATHS, AND NEW CASES REPORTED BY YEAR
STATE OF HAWAII, 1930, 1940, 1950, 1960, 1970 through 1978

Year	Deaths	New Cases Reported	Tuberculosis Cases
1930	379	1,060	1,060
1940	257	717	717
1950	114	743	339
1960	13	462	293
1970	13	733	270
1971	13	828	328
1972	7	894	315
1973	8	741	303
1974	3	899	364
1975	5	869	338
1976	2	909	338
1977	3	848	291
1978	5	914	290

TABLE 17

SELECTED SERVICES GIVEN IN CHEST CLINICS BY GEOGRAPHIC AREA
STATE OF HAWAII, 1978

Geographic Area	Clinic Visits	X-rays Done	Sputum Specimens Obtained for Culture	Tuberculin Tests	Patients on Chemoprophylaxis and chemotherapy December 31, 1978
State of Hawaii	48,043	21,904	7,402	26,495	5,301
County of Honolulu	43,249	17,427	6,419	18,947	2,499
Lanakila Health Center ...	39,663	15,634	6,032	18,785	2,272
Rural Chest Clinics	3,586	1,793	387	162	227
County of Hawaii	1,677	1,508	766	210	753
County of Maui*	2,583	2,583	170	6,473	1,643
County of Kauai	534	386	47	865	406

*Includes Kalawao County

DENTAL HEALTH
DIVISION

DENTAL HEALTH DIVISION
DEPARTMENT OF HEALTH ANNUAL REPORT

SUMMARY

A trial program of referring gap group patients to the Hawaii Dental Association for dental service at affordable rates was concluded in the first three months of the 1978 fiscal year. Unfortunately, the program did not meet the needs of many of the gap patients efficiently and at reasonable costs. In view of these findings the Director of Health authorized the three community dental clinics operated by the Dental Health Division to resume treating gap patients. Potential patients or families to be treated in this category were to undergo a detailed financial screening and only those qualifying under the gap criteria were accepted for treatment by the program.

Resuming the program was hampered by a lack of dentists to provide treatment and a need to inform the public of the services available. All clinics were initially opened on a part time basis until June, 1978 when the clinic positions were filled and new dentists hired. Between January and June, 1978 the Dental Health Division and Health Education Office met with representatives of the Hawaii Dental Association and other Community Clinics to design and publish a pamphlet entitled, "A Guide to Dental Care for Persons with Low Income". The pamphlet was to be used by nurses, social workers and others in the health field to assist the financially needy in obtaining affordable dental care. Demands for the pamphlets outnumbered the supply within the first few months after it was printed. It is the hope of the Department that the Hawaii Dental Association and all programs listed in the pamphlet will actively participate in treating the gap patient at affordable rates since it appears that a national health program which covers dental care will not be a reality in the near future.

Programs of the Division continued to emphasize prevention. Nearly two-thirds of the funds spent were for activities in prevention. The numbers of topical fluoride applications provided to school children reached 78,000. In the dental hygiene program for schools plans were made for the eventual distribution of teaching packets to each grade level in public schools in order to establish some uniformity and continuity in dental health education. The packets to be distributed are produced by the American Dental Association for use by school teachers in teaching dental health. Acquisition of these packets is expected next year for distribution during the following school year.

All deficiencies in the dental program cited by the reviewing team for hospital certification were corrected at Waimano Training School and Hospital. Procedures were reaffirmed during the year in all institutional programs served by the Division to ensure compliance and continued certification of these facilities.

From reports being made by residents of the Ka'u district on Hawaii, it appears that there is still a shortage of dentists to serve residents in that area. Active recruitment for a dentist from the mainland has not been successful. Alternative solution to this shortage problem will be investigated in the future.

TABLE 1

SUMMARY OF DENTAL HEALTH SERVICES
STATE OF HAWAII, FISCAL YEAR 1977-1978

Type of Services	Number Served
Prevention and Detection	
Number of School Children Given Topical Fluoride Applications	78,282
Number of School Children Referred to Private Dentists	218,162
Number of School Children Given Dental Health Education	3,402
Treatment	
Number of Persons Treated in Institutions	986
Number of Persons Treated in Community-centered Facilities	1,810

TABLE 2

DISTRIBUTION OF DENTAL HYGIENE SERVICES BY COUNTIES
STATE OF HAWAII, FISCAL YEAR 1977-1978

Year and County	Number of Schools Served		Number of Children Served		
	Public	Private	Number of Dental Inspections or Referrals and Follow-up	Number of Fluoride Applications	Dental Health Education
1976-1977 STATE	199	113	209,102	74,333	5,337
1977-1978 STATE	207	103	218,162	78,282	3,402
OAHU	153	89	184,717	63,174	2,383
HAWAII	26	6	16,595	5,792	194
KAUAI	13	4	11,368	6,021	812
MAUI	15	4	5,482	3,295	13

TABLE 3

DENTAL TREATMENT STATUS OF CHILDREN IN 193 SCHOOLS BY AREAS
STATE OF HAWAII, F.Y. 1977-1978

Area	Number of Schools Reported	Enrollment	Number of Children in Grades Kindergarten - 12th: Completed Treatment	Receiving Treatment	No Treatment During School Year	Percent Completed and Receiving Treatment
STATE 1976-1977	194	134,435	19,274	26,018	89,143	33.7
STATE 1977-1978	193	139,495	18,097	33,049	88,349	36.7
HONOLULU CITY	56	39,811	5,990	10,601	23,220	41.6
RURAL OAHU	92	81,692	7,760	20,874	53,058	35.5
Central Oahu	35	29,923	3,140	6,738	20,045	33.0
Leeward Oahu	29	30,722	2,761	6,737	21,224	30.9
Windward Oahu	28	21,047	1,859	7,399	11,789	44.0
HAWAII....................	23	10,798	1,694	69	9,035	16.3
KAUAI	16	5,346	2,580	1,202	1,564	70.7
MAUI (Report not available)	-	-	-	-	-	-
MOLOKAI	6	1,848	73	303	1,472	20.3

TABLE 4

TREATMENT DATA
HOSPITAL DENTISTRY & COMMUNITY SERVICES BRANCH
STATE OF HAWAII, F.Y. 1977 - 1978

	PATIENTS				SELECTED PROCEDURES							
CLINICS	No. of New Patients	Adults	Minors	NO. COMPLETED TREATMENT	Examinations	Radiographs	Prophylaxis	Topical Fluoride Applications	Fillings	Extractions	Crowns	Dentures
TOTAL	2,796	1,588	1,208	2,387	3,316	1,387	1,743	448	3,903	1,015	68	349
Institutional	986	901	85	1,000	1,333	202	340	70	804	390	12	289
Community-centered	1,810	687	1,123	1,387	1,983	1,185	1,403	378	3,099	625	56	60

ENVIRONMENTAL PROTECTION
AND
HEALTH SERVICES DIVISION

SUMMARY

The Pollution Investigation and Enforcement Branch of the Environmental Protection and Health Services Division is responsible for preserving and improving the quality of all coastal and fresh waters of the State and also maintaining and enhancing the quality of air in Hawaii through an enforcement and monitoring program.

The branch is involved in the following activities:

1. Determination of violation and enforcement of pollution control regulations.
2. Monitoring of ambient conditions with air and water quality standards as control measures.
3. Investigation of critical areas, special studies, and complaints by the public.

TABLE 1
SUMMARY OF AIR QUALITY DATA
STATE OF HAWAII, 1978
(24-Hour Sampling)

Sampling Stations[a]	Micrograms Per Cubic Meter (ug/m^3)					
	Particulate Matter			Sulfur Dioxide		
	No. of Samples	Annual Average	Annual Maximum	No. of Samples	Annual Average	Annual Maximum
Dept. of Health Bldg. - Oahu	60	29	53	61	18	44
Barbers Point - Oahu	59	48	127	57	<5	40
Pearl City - Oahu	60	37	81	58	15	74
Kalihi Kai - Oahu	58	46	80	57	<5	7
Ala Moana - Oahu	61	38	79	61	<5	5
Waimanalo - Oahu	60	29	61	...	...	...
Kahului - Maui	55	74	154	55	63	273
Kihei - Maui	40	54	160	...	...	...
Hilo - Hawaii	54	34	169	55	<5	45
Lihue - Kauai	59	37	124	54	<5	<5
Barbers Point Lighthouse	...	...	...	56	<5	7

	Particulate Matter (micrograms/cubic meter)	Sulfur Dioxide (micrograms/cubic meter)
State of Hawaii Ambient Air Quality Standards	55 - annual ave.	20 - annual ave.
Federal Primary Ambient Air Quality Standards	75 - annual ave.	80 - annual ave.

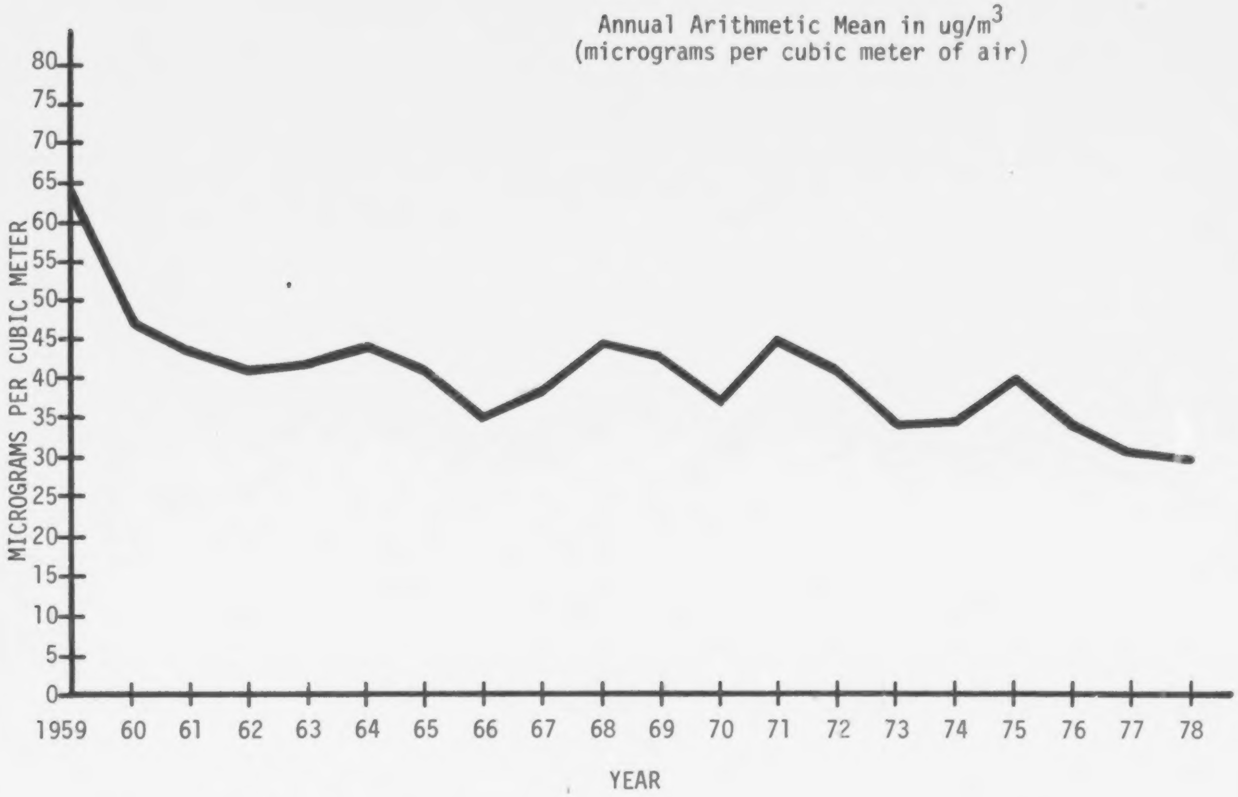
[a] Period of Sampling - 12 months

(... pollutants not sampled at these sites)

FIGURE 1

TREND OF TOTAL SUSPENDED PARTICULATE MATTER IN THE AIR

City of Honolulu, State of Hawaii 1959-78



Date	ug/m^3
1959	63
1960	47
1961	43
1962	41
1963	42
1964	44
1965	41
1966	35
1967	38
1968	45
1969	43
1970	37
1971	45
1972	41
1973	34
1974	35
1975	40
1976	34
1977	31
1978	29

Sampling conducted from roof of State Health Department building, 1250 Punchbowl Street, Honolulu, Hawaii, approximately 46 feet above the ground. Prior to 1961, the sampling was conducted at the old Health Department building at Queen and Punchbowl streets.

According to the Environmental Protection Agency, the annual mean level at which human health might become affected is 80 ug/m^3 accompanied by sulfation levels of 0.3 milligrams per square centimeter for one month.

POLLUTION TECHNICAL REVIEW BRANCH

One of the primary functions of the Pollution Technical Review Branch is the administration of a permit and registration system for air, water and solid waste programs by reviewing and evaluating applications and engineering reports and plans.

The Branch also coordinates construction grant activities for the construction of municipal wastewater treatment facilities between the counties and the U.S. Environmental Protection Agency.

CONSTRUCTION GRANTS PROGRAM

The major function of Project Management Section #1 is to administer the Construction Grants Program for public wastewater treatment works pursuant to P.L. 92-500. Under the said program, 75 per cent of the cost of constructing public treatment facilities are financed with federal funds, 10 per cent by state funds and 15 per cent by county funds. A total of $35,676,000 of federal funds were allocated to the State of Hawaii for fiscal year 1978.

The administering of the program includes review of grant applications, facilities plans, environmental impact statements, infiltration-inflow analysis, construction plans and specifications, payment requests, construction activities contracts and other technical documents. A project is broken down into three (3) steps which include Step 1 (development of a facilities plan), Step 2 (development of construction plans and specifications) and Step 3 (construction).

The following statistics indicate federal grants awarded for various projects, projects completed and total number of inspections conducted:

Table 1

Grants Award To:	Project Step	Federal Grant Amount
Kealakekua Wastewater Treatment Works	1	$ 98,290
Lanai City Wastewater Treatment Works	1	26,250
Kailua-Kona Wastewater Treatment Works, NZ	1	42,674
Papaikou Wastewater Treatment Works	1-2	138,563
Honouliuli Interceptor Sewers, Part B	3	2,026,950
Hart Street Pump Station	3	1,990,312
Pearl City Force Main, Sec. 1A	3	8,631,940
Pearl City Force Main, Sec. 1B	3	5,941,554
Pearl City Force Main, Sec. 2	3	7,785,375
Pearl City Pump Station	3	2,727,253
Ala Moana Force Main, Sec. 2	3	3,047,222
Ala Moana Force Main, Sec. 3	3	1,518,096
		$33,974,479

Table 2

Projects Completed:	Project Step
Papaikou Wastewater Treatment Works	1
Honouliuli Interceptor Sewers, Part B	2
Hart Street Pump Station	2
Pearl City Force Main, Sec. 1A	2
Pearl City Force Main, Sec. 1B	2
Pearl City Force Main, Sec. 2	2
Pearl City Pump Station	2
Ala Moana Force Main, Sec. 2	2
Ala Moana Force Main, Sec. 3	2
Kulaimano Wastewater Treatment Works	3
Hanapepe-Eleele Wastewater Treatment Works	3
Barbers Point Ocean Outfall	3
Mokapu Ocean Outfall	3

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

This includes resolution of adjudicatory hearing requests, issuance of new permits and zone of mixing, renewals and modifications of existing permits and zones of mixing, environmental impact statements review associated with proposed permits for new sources, technical review and approval of all compliance schedules and engineering reports and plans, and the evaluation of thermal discharges from power generating facilities. Inspections are conducted prior to issuance and renewal of all permits and zones of mixing as well as monitoring progress towards final compliance with terms and conditions of each permit.

Table 3

Permits Issued or Renewed (23)

- City & County of Honolulu:
  - Pearl City STP
  - Waipahu STP
  - Kukanono STP
  - Pohakupu STP
  - Pacific Palisades STP
  - Ahuimanu STP
- State of Hawaii:
  - Kahului Airport, DOT
  - Anuenue Fishery, DLNR
  - UH-Kewalo Fishery
  - Samuel Mahelona Hospital, DOH
- Pacific Resources Terminal
- Shell Oil Company
- Laupahoehoe Sugar Co.
- Honokaa Sugar Co.
- Hawaiian Tuna Packers
- County of Hawaii - Kulaimano STP
- County of Kauai - Eleele STP
- Hilo Coast Processing Co. Pepeekeo Mill
- HECO-Kahe
- County of Maui:
  - Wailuku STP
  - Kahului STP
  - Lahaina STP
  - Chevron, USA, Barbers Point Refinery

Permits Modified (5)

- Laupahoehoe Sugar Co.
- Honokaa Sugar Co.
- Sheraton Waiakea Hotel
- HECO-Waiau
- HECO-Honolulu

Zones of Mixing (0)

None

AIR POLLUTION CONTROL AND SOLID WASTE MANAGEMENT PROGRAMS

Project Management Section #2 of the Pollution Technical Review Branch is charged with administration of the permit system for solid waste management facilities and new sources of air pollution. The basic thrust of our program is to control new sources of air pollution to ensure compliance with emission standards and ambient air quality standards and control solid waste disposal sites to ensure safe disposal in compliance with law.

Our solid waste management permit system is aimed at closing open dumps and improving operation at landfill sites. As open dumps are phased out, it becomes critical that the remaining sites are operated in accordance with good engineering practice to maximize the productive life of the facility. Our permit system attempts to control the landfill operation through imposition of the requirements of Chapter 46, Public Health Regulations.

The air pollution permit system is limited to new sources and is a two-part system consisting of an Authority to Construct and a Permit to Operate. Plans are reviewed and discussed prior to issuance of the Authority to Construct. Following completion of the construction phase and initiation of operation, an inspection to ensure compliance with all standards and regulations is made prior to issuance of the Permit to Operate.

Table 4

Air Pollution Control	1977
Authority to Construct Permits Issued	29
Permits to Operate Issued	38
Solid Waste Management	
Applications Filed	14
Applications Denied	1
Permits Issued	13
Permits Extended, Modified or Transferred	12

FOOD AND DRUG BRANCH

The Food and Drug Branch in the Environmental Protection and Health Services Division protects the health of the consumer by ensuring that foods are safe, pure and wholesome; drugs and therapeutic devices are safe and effective; cosmetics are harmless; and that all these products are honestly and informatively labeled, packaged and advertised; controlled substances, including narcotics, are distributed, prescribed and dispensed in accordance to rigid control requirements so as to avert their illegal diversion. The Branch is also empowered to require that certain hazardous household products carry adequate label warnings for the safety of children and to be packaged with safety closures.

The objectives of the Food and Drug Branch are carried out by two sections under its jurisdiction: the Food and Drug Section and the Investigations and Narcotics Control Section.

The Food and Drug Section administers the Hawaii Food, Drug and Cosmetic Act, the Hawaii Poison Prevention Packaging Act, the regulations on milk, frozen desserts, and poisons, while the Investigations and Narcotics Control Section administers the Uniform Controlled Substances Act.

The Food and Drug Section has a staff of six field inspectors and one supervisor. This section operates under the administration of the Chief, Food and Drug Branch. Its primary responsibilities involve the inspecting of food and drug establishments, investigating consumer complaints and collecting various specimens for examination either in the field or by the Laboratories Branch for conformity with purity, labeling, and identity standards.

A part of this section is involved in the shellfish sanitation program. Its primary duty is the enforcement of the recently adopted regulations on shellfish. Samples collected in 1978 indicated that shellfish and water from shellfish growing areas largely met these standards.

Table 1 shows the number of samples examined by this section. An index of one of the responsibilities of the section is indicated in Table 2 which shows the pounds of commodities that were destroyed during 1978. As might be expected, Oahu with the largest population among the islands had the bulk of the foods and drugs destroyed. Table 3 shows the number of complaints investigated. No data have been kept on the number of complaints received which were resolved over the telephone. The steady increase in the number of complaints indicates that citizens are becoming more aware of individual rights and thus are expressing their reactions to the problems of foods, drugs and cosmetics. The number of labels reviewed shows that there is a steady increase in the demand for this service. The term "Agency Assistance" refers to other state and federal agencies requesting inspections and the collection of samples in conjunction with regulatory matters of mutual concern and responsibility. The number of poison permits issued have not increased significantly. Table 4 and 5 show that sampling activities of milk, milk products and frozen desserts have increased markedly from the previous year. This is the result of our being able to fill the permanent position assigned to the sampling of these products on Oahu.

The primary objective of the Investigations and Narcotics Control Section (INCS) is to minimize the diversion of controlled substances. This is accomplished through Statewide enforcement of the Uniform Controlled Substances Act, Chapter 329, Hawaii Revised Statutes, by a field staff of seven investigators[1/] and one supervising investigator.

From August 1978 to October 1980, the program emphasis has and will be upon increasing the staff capabilities in the conducting of criminal diversion investigations at the registrant level through the implementation of the two-year federal grant.

Activities reported on Tables 6 and 7 indicate that for 1978:

- A total of approximately 80,200 Schedule II prescriptions were prescribed by approximately 2,300 practitioners or 90% of the total registrant population and filled by 146 pharmacies.
- The number of prescriptions decreased by 5% or approximately 4,000 in 1978 as compared to 1977. While there exists no conclusive factors which account for the decrease, it can be surmised that the situation may be attributable to more effective regulatory controls imposed by the field staff and more responsible practice on the part of registrant practitioners.

[1/] One Federal Drug Enforcement Agent and two investigators started in August 1978 as part of the federal grant.

- It appears that whenever the illegal flow of drugs from legitimate channels is curtailed, there is a proportional upsurge in prescription fraud and drug thefts. The number of cases for both these indicators show an increase in 1978. Investigations, including those for prescription fraud, increased by 44% or 46 cases, whereas drug thefts increased by 36% or 10 cases.

- There was a slight decrease in the number of registrant inspections conducted. Program wise, the objective throughout the next fiscal year will be to maintain or increase registrant inspections. It is clearly recognized that registrant inspections are a primary means by which to prevent drug diversion.

- Investigative cases increased by 44% over 1977. Investigative workload is expected to continue to increase throughout the next fiscal year, with the emphasis upon in-depth investigations of drug diversion. As such, it should be noted that while the number of cases may decrease, workload will increase in the next fiscal year.

- The quantity and value of drugs disposed and stolen decreased. While inconclusive, it would appear that 1) the decreases may indicate that the ordering, stocking and dispensing practices of registrants are more in line with the demand for such drugs, and 2) the unit dosage of controlled substances stolen as well as the wholesale value are less per case than that reported for 1977.

- The number of initial registration and annual re-registration of persons and/or businesses manufacturing, distributing, prescribing, administering , dispensing or conducting research involving controlled substances increased in all categories--practitioners, dentists, pharmacies and others. The overall registrant population is anticipated to continue to increase over the next few years.

TABLE 1

SUMMARY OF SAMPLES EXAMINED BY THE FOOD AND DRUG SECTION ON OAHU
STATE OF HAWAII, 1978

Samples	Total Collected	Acceptable a/	Not Acceptable
Alimentary Paste Products	12	12	-
Bread	16	16	-
Vegetables (pesticide, lead)	3	3	-
Poi	6	1	5
Poi, Ready-mixed	11	9	2
Hamburger/ground beef	541	417	124
Shellfish Samples b/			
1. From market			
a. Local	1	1	-
b. Out-of-state	3	3	-
2. From growing areas			
a. Approved growing areas	14	11	3 c/
b. Unapproved growing areas d/	-	-	-
Water Samples			
1. From approved growing areas	21	18	3
2. From unapproved growing areas d/	27	7	20
3. From areas associated with shellfish growing areas	39	32	7

a/ Meets applicable standard or guidelines
b/ Each sample represents at least 10 individual shellfish.
c/ Before depuration process
d/ i.e., Pearl Harbor, Kaneohe Bay

TABLE 2

FOODS AND DRUGS CONDEMNED AND DESTROYED BY COUNTY

STATE OF HAWAII, 1978

County	Weight in Pounds	Retail Value
FOODS		
Honolulu	415,340	$ 202,390
Hawaii	24,888	5,753
Maui	63,488	304,785
Kauai	33,573	37,797
Total:	537,289	$ 550,725
DRUGS		
Honolulu	1,622	$ 17,660

TABLE 3

SELECTED ACTIVITIES OF THE FOOD AND DRUG SECTION

STATE OF HAWAII, 1978

Activities		Number
Complaints Investigated		175
Agency Assistance *		12
Label Reviews		775
Total Poison Permits Issued		1114
Honolulu Co.	739	
Hawaii Co.	176	
Kauai Co.	59	
Maui Co.	140	

* Inspections conducted and/or samples collected jointly with or at request of other agencies.

TABLE 4

SAMPLES AND ANALYSES OF MILK AND MILK PRODUCTS BY COUNTY
STATE OF HAWAII, 1978

County and Grade of Milk	Total	Viol.	Bacteriological		Chemical		Coliform		Inhibitory	
			Total	Viol.	Total	Viol.	Total	Viol.	Total	Viol.
Honolulu County										
Raw Milk	339	70	328	60	339	31	...	...	300	2
Homogenized	21	3	21	-	39	3	21	-	16	-
Other Milk Products *	341	29	146	1	341	19	314	9	123	-
Hawaii County										
Raw Milk	95	20	95	14	95	7	...	...	95	1
Homogenized	18	1	18	-	18	1	18	-	...	...
Other Milk Products *	101	2	101	-	101	2	101	-	...	...
Maui County										
Raw Milk	30	3	30	3	30	-	...	...	30	-
Homogenized	12	-	12	-	12	-	12	-	...	...
Other Milk Products *	51	1	51	1	51	-	51	-	...	...
Kauai County										
Raw Milk	11	1	11	-	11	1	...	...	11	-
Homogenized	11	1	11	-	11	1	11	-	...	...
Other Milk Products *	31	-	31	-	31	-	31	-	...	...
State Totals										
Raw Milk	475	94	464	77	475	39	...	...	436	3
Homogenized	62	5	62	-	80	5	62	-	16	-
Other Milk Products *	524	32	329	2	524	21	497	9	123	-

* Other Milk Products include recombined milk, imitation milk, 2% butterfat milk, half and half, skim milk, yogurt and sour cream.

TABLE 5

SAMPLES AND ANALYSES OF FROZEN DESSERTS BY COUNTY
STATE OF HAWAII, 1978

Type of Frozen Dessert	All Counties		Honolulu		Hawaii		Maui		Kauai	
	Total	Viol.	Total	Viol.	Total	Viol.	Total	Viol.	Total	Viol.
Ice Milk	1344	470	1034	427	101	13	83	17	126	13
Ice Cream	103	9	99	9	-	-	4	-	-	-
Sherbert	39	13	28	12	-	-	11	1	-	-
Frozen Yogurt	436	40	384	30	3	-	45	10	4	-
Frozen Confection	11	1	7	-	2	-	2	1	-	-
Total	1933	533	1552	478	106	13	145	29	130	13

TABLF 6

INVESTIGATIONS AND NARCOTICS CONTROL SECTION
PROGRAM ACTIVITIES UNDER CHAPTER 329
HAWAII REVISED STATUTES
STATE OF HAWAII, 1978

Controlled Substances Activities	Total
Schedule II: Prescription Reviews a/	80,228
Inspections: Registrants	325
Investigations	151
Disposals	
1. Cases	107
2. Pounds Disposed b/	505
3. Value	$15,039
Thefts c/	
1. Cases	38
2. Unit Doses	32,579
3. Value	$ 5,325

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a/ Schedule II controlled substances include amphetamines, barbiturates, and narcotics having a high potential for abuse.

b/ Dry weight, excludes fluid weight.

c/ Thefts reported by practitioners and pharmacies, includes armed robberies, burglaries, reported missing controlled substances.

TABLE 7

BREAKDOWN OF REGISTRANT POPULATION BY TYPE; FEES COLLECTED
UNDER CHAPTER 329, HAWAII REVISED STATUTES
STATE OF HAWAII, 1978

Registrants	Number	Fees Collected
Practitioners	1,802	$ 10,210
Dentists	506	2,635
Pharmacies	146	770
Others *	109	465
TOTAL	2,563	$ 14,080

---

* Includes other medical, teaching institutes, researchers and special registrants.

SUMMARY - CALENDAR YEAR 1978

The principal activity of the Sanitation Branch is to maintain a sanitary and healthful environment for the people in Hawaii by providing inspectional, educational and enforcement activities. Sanitarians investigate and abate insanitary conditions and health hazards, prevent the creation of public health nuisances and minimize insanitary conditions which may be a threat to health. Inspections are made of food and food service establishments; milk plants, frozen dessert manufacturing plants; dairy farms; dwelling units, hotels and other multi-dwelling units; public swimming pools; barber shops; mortuaries and cemeteries; laundries; private sewage disposal systems and various other premises for certificates of approval, clearances for licensure or for permit issuance; or for compliance with public health standards and requirements.

The total number of inspections decreased from 63,898 in 1977 to 62,558 in 1978. However, the total number of insanitary conditions abated increased from 10,830 in 1977 to 13,985 in 1978. This increase in abatement of insanitary conditions reflects the desire towards accomplishing our objectives.

TABLE 1

AVERAGE DAILY PRODUCTION OF PASTEURIZED MILK BY ISLAND
STATE OF HAWAII, 1978

Island	Average Daily Production (Pounds)
Total	431,391
Oahu	327,475
Hawaii	47,320
Maui County*	30,960
Kauai	25,636

*Includes the islands of Maui, Molokai and Lanai

No retail raw milk is sold for human consumption in the State.

2.15 pounds = 1 quart

TABLE 2

DAIRIES AND MILK PLANTS AS OF DECEMBER 31, 1978
BY TYPE AND ISLAND

Type	Total	Island			
		Oahu	Hawaii	Maui County*	Kauai
Pasteurization Plants	5	2	1	1	1
Milk Plant Producers	122	116	4	1	1

*Includes the islands of Maui, Molokai and Lanai

TABLE 3

DISTRIBUTION OF SANITARY INSPECTIONS BY TYPE AND ISLAND
STATE OF HAWAII, 1978

Type of Inspection	Total	Island			
		Oahu	Hawaii	Maui County*	Kauai
Total Inspections	62,558	33,591	13,534	9,264	6,169
Dwellings	4,977	2,628	234	872	1,243
Apartments	2,154	1,799	109	244	2
Hotels	913	549	67	241	56
Lodging Houses	39	29	-	7	3
Tenements	128	125	-	3	-
Boarding Houses	50	42	2	3	3
Adult Family Boarding Homes	257	185	43	26	3
Care Homes	349	278	23	19	29
Day Care Centers	450	285	62	86	17
Kindergartens, Schools	1,169	564	116	458	31
Institutions, Hospitals	1,808	208	13	1,578	9
Funeral Establishments, Cemeteries	121	47	36	33	5
Liquor Dispensers	3,020	2,188	412	293	127
Grocery Stores	3,745	2,387	707	407	244
Markets	2,849	2,344	236	160	109
Bottling Plants, Canneries	116	71	6	35	4
Food Manufacturers	2,707	1,631	565	401	110
Restaurants, Cafeterias, Drive-Ins, Lunch Counters, Etc.	11,804	8,861	1,358	987	598
Food Sales	951	478	196	134	143
Lunch Wagons	820	743	37	26	14
Food Peddlers	117	88	10	17	2
Dairy Farms, Milk Plants	1,373	910	330	96	37
Frozen Dessert Plants	214	146	-	21	47
Dispensing Freezers, Shave Ice Outlets	323	128	129	9	57
Vending Machine Operations	2	2	-	-	-
Warehouses	663	569	15	55	24
Hog Ranches, Poultry Farms, Feed Lots	144	44	25	36	39
Slaughterhouses	30	2	3	14	11
Vegetable Gardens	44	7	35	2	-
Flower Gardens	30	22	5	3	-
Barber Shops, Beauty Parlors	342	263	50	18	11
Massage Parlors, Reducing Salons	90	61	13	15	1
Tattoo Shops	15	13	-	2	-
Clothes Cleaners, Laundries	116	79	17	13	7
Secondhand Dealers	1	-	1	-	-
Mattress Makers	3	2	-	1	-
Amusement Places, Parks, Playgrounds	713	182	198	309	24
Recreational Trailer Camps	13	7	-	6	-
Industrial Plants, Small Shops, General Merchandise	1,315	128	84	1,010	93
Swimming Pools	577	282	206	62	27
Household Sewage Disposal Systems, House Drain, Sewer	8,067	1,780	4,532	1,197	558
Subdivisions	670	122	98	179	271
Unclassified	9,269	3,312	3,561	186	2,210

*Includes the islands of Maui, Molokai and Lanai

TABLE 4

SUMMARY OF ACTIVITIES BY SANITARIANS
STATE OF HAWAII, 1978

A. INSPECTION, INVESTIGATION, ENFORCEMENT	Oahu	Hawaii	Maui County*	Kauai	Total
1. Insanitary Practices and Hazardous Conditions Abated					
Structures Repaired	113	11	20	80	224
Plumbing, Fixtures Repaired	44	13	7	15	79
Water Supply Violations Corrected	26	31	17	8	82
Sewage Disposal Violations Corrected	112	338	239	32	721
Ventilation Corrected	28	3	18	4	53
Floor, Walls, Ceiling Cleaned	44	10	2	39	95
Streets, Alleyways, Yards, Cleaned of Rubbish, etc.	147	28	12	8	195
Garbage Containers, Conveyances Corrected	150	23	7	7	187
Domestic Animals, Poultry Nuisances Abated	221	16	20	14	271
Vermin, Rodent, Birds, Animal Nuisances Abated	231	13	26	15	285
Food Equipment Replaced, Repaired	60	17	-	25	102
Food Equipment Utensils Cleaned	8	1	20	20	49
Food Equipment, Utensils Sanitized	16	1	2	6	25
Food Equipment, Utensils Properly Stored, Handled	47	4	3	7	61
Food Storage, Display, Handling Corrected	65	5	53	34	157
Insanitary Personnel Practices Abated	76	-	-	8	84
Food Handlers' Certificate Obtained	43	3	2	4	52
Toilet Room and Facilities Cleaned, Repaired	33	4	7	6	50
Barber, Beauty Shop Instruments Cleaned, Sanitized	5	-	-	-	5
Swimming Pool Disinfected; pH Maintained	11	18	2	3	34
Depth Marking Violations Corrected	2	6	-	1	9
Swimming Pool Safety Violations Corrected	5	35	2	5	47
Bacteriological Standards Met	-	3	4	-	7
Abnormal Milk Excluded	-	1	-	-	1
Milking Procedures Corrected	47	-	-	-	47
Thermometric Controls in Compliance	2	-	2	29	33
Pressure Differential of Pasteurizer Met	-	-	3	-	3
Holding Time of Pasteurizer Met	2	-	-	-	2
Required Data on Recorder-Controller Charts Furnished	4	1	3	-	8
Miscellaneous Nuisances Abated	114	69	86	63	332
Total Corrections Made	1,573	654	684	412	3,323

TABLE 4 (Continued)

A. INSPECTION, INVESTIGATION, ENFORCEMENT	Oahu	Hawaii	Maui County*	Kauai	Total
2. Field Test for Cl, pH, Alk., Sed., Abnormal Milk, Pasteurization Equipment, etc.	116	2,020	1,534	781	4,451
3. Samples Collected: Milk, Food, Water, Swabs, etc.	183	2,451	1,650	967	5,251
4. Complaints Investigated	1,644	325	308	334	2,611
Warnings Given	903	406	30	49	1,388
Verbal Orders Given	1,067	392	514	246	2,219
Verbal Orders Finished	1,053	431	684	251	2,419
Total Verbal Orders Unfinished	666	2,347	229	61	3,303
Written Orders Given	17	2	8	12	39
Written Orders Finished	20	-	23	10	53
Total Written Orders Unfinished	35	2	3	2	42
5. Certificates Issued	798	26	272	155	1,251
6. Permits Issued	61	12	120	110	303
7. Permits Degraded	-	-	-	5	5
8. Permits Suspended, Revoked	1	-	-	-	1
9. Prosecutions	-	-	-	-	-

B. EDUCATION	Oahu	Hawaii	Maui County*	Kauai	Total
1. Food, Milk Handlers' Class	5	-	1	1	7
2. Workshops, Meetings	30	114	75	43	262
3. In-Service Training	16	-	39	30	85

C. TECHNICAL REVIEW AND CONSULTATION PROVIDED	Oahu	Hawaii	Maui County*	Kauai	Total
	8	667	33	1,258	1,966

*Includes the islands of Maui, Molokai and Lanai

TABLE 5

DAILY SUMMARY OF FOOD SERVICE AND FOOD ESTABLISHMENTS
STATE OF HAWAII, 1978

1. INSPECTION, INVESTIGATION, ENFORCEMENT	TOTAL	Oahu	Hawaii	Maui County*	Kauai
A. Insanitary Practices and Hazardous Conditions Abated					
1. Food Source, Wholesome	126	37	49	9	31
2. Food--Original Container, Properly Labeled	66	22	16	10	18
3. Potentially Hazardous Food Meets Temperature Requirements	194	98	26	24	46
4. Facilities to Maintain Product Temperature	95	23	20	27	25
5. Thermometers Provided and Conspicuous	223	97	12	68	46
6. Potentially Hazardous Food Properly Thawed	116	75	15	18	8
7. Unwrapped and Potentially Hazardous Food Not Re-served	12	7	1	2	2
8. Food Protection--Storage, Preparation, Display, Service Transportation	1,383	964	221	125	73
9. Handling of Food (Ice) Minimized	35	19	6	4	6
10. Food (Ice) Dispensing Utensils Properly Stored	108	67	22	11	8
11. Personnel Infections, Communicable Disease Restricted; TB Clearance Card	3,031	2,759	45	203	24
12. Hands Washed and Clean, Good Hygienic Practice	245	179	46	12	8
13. Clean Clothes, Hair Restraints	280	222	31	5	22
14. Food Contact Surfaces: Designed, Constructed, Maintained, Installed	334	221	69	18	26
15. Non-Food Contact Surfaces: Designed, Constructed, Maintained, Installed	223	101	73	24	25
16. Dishwashing Facilities: Designed, Constructed, Maintained, Installed	156	96	17	14	29
17. Accurate Thermometers	40	30	3	6	1
18. Single-Service Articles, Storage, Dispensing	110	80	14	10	6
19. No Re-Use of Single-Service Articles	22	13	2	2	5
20. Pre-Flushed, Scraped, Soaked	1	1	-	-	-
21. Wash, Rinse Water: Clean, Proper Temperature	25	17	-	7	4
22. Sanitization Rinse: Clean, Temperature, Concentration	173	124	19	11	19
23. Wiping Cloths: Clean, Use Restricted	26	21	2	41	38
24. Food-Contact Surfaces of Equipment and Utensils Clean	1,446	1,235	143	41	27
25. Non-Food Contact Surfaces of Equipment and Utensils Clean	1,156	890	144	84	38
26. Storage, Handling of Clean Equipment-Utensils	187	123	20	34	10
27. Water Source, Safe: Hot & Cold Under Pressure	78	52	6	8	12

TABLE 5 (Continued)

1. INSPECTION, INVESTIGATION, ENFORCEMENT	TOTAL	Oahu	Hawaii	Maui County*	Kauai
28. Sewage and Waste Water Disposal	58	23	18	5	12
29. Plumbing--Installed, Maintained	125	64	33	15	13
30. Plumbing--Cross-Connection, Back Siphonage, Backflow	23	14	1	6	2
31. Toilet & Handwashing Facilities--Number, Convenient, Accessible, Installed	200	119	18	17	46
32. Toilet Rooms, Self-Closing Doors, Good Repair, Clean Hand Cleanser, Sanitary Hand-Drying. Proper Waste Receptacles	618	424	29	122	43
33. Garbage & Refuse Disposal Receptacles Covered: Adequate No., Insect/Rodent Proof, Clean	115	58	19	27	11
34. Outside Storage Area, Enclosures Properly Constructed, Clean: Incineration Controlled	59	30	9	15	5
35. Presence of Insects, Rodents--Outer Openings Protected, Turtles, Other Animals, Proper Insecticides	857	546	107	150	54
36. Floors: Constructed, Drained, Clean, Good Repair, Covering Installation, Dustless Cleaning Method	595	369	99	81	46
37. Walls, Ceiling, Attached Equipment: Constructed, Good Repair, Clean, Surfaces, Dustless Cleaning Methods	545	326	100	60	59
38. Lighting Provided as Required	50	43	5	2	-
39. Rooms and Equipment--Vented as Required	95	69	8	4	14
40. Dressing Rooms--Rooms Clean, Lockers Provided, Facilities Clean	22	14	1	6	1
41. Toxic Items Properly Stored, Labeled, Used	374	320	35	14	5
42. Premises: Maintained, Free of Litter, Unnecessary Articles, Cleaning/Maintenance Equipment Properly Stored, Authorized Personnel	283	167	33	51	32
43. Complete Separation from Living/Sleeping Quarters, Laundry	26	17	2	3	4
44. Clean, Soiled Linen Properly Stored	62	58	1	3	-
Total Corrections Made	13,985	10,224	1,540	1,361	860
B. Field Test for Cl, pH, Alk., etc.	664	189	201	26	248
C. Samples Collected: Food, Water, Swabs, etc.	1,588	1,332	102	53	101
D. Complaints Investigated	704	576	81	14	33
E. Orders and Warnings					
Warnings Given	5,406	4,293	381	496	236
Verbal Orders Given	8,385	5,266	1,070	1,517	532
Verbal Orders Finished	7,911	4,842	1,204	1,361	504

TABLE 5 (Continued)

1. INSPECTION, INVESTIGATION, ENFORCEMENT	TOTAL	Oahu	Hawaii	Maui County*	Kauai
Total Verbal Orders Unfinished	4,437	3,008	429	964	36
Written Orders Given	8	3	-	3	2
Written Orders Finished	123	1	-	120	2
Total Written Orders Unfinished	9	7	-	-	2
F. Certificates Issued	3,663	3,025	50	578	10
G. Permits Issued	1,279	665	367	75	172
H. Permits Suspended, Revoked	2	1	-	1	-
I. Prosecutions	-	-	-	-	-

2. EDUCATION	TOTAL	Oahu	Hawaii	Maui County*	Kauai
A. Food Handlers' Class	75	21	38	15	1
B. Workshops, Meetings	82	32	19	20	11
C. In-Service Training	43	15	4	14	10

3. TECHNICAL REVIEW AND CONSULTATION PROVIDED	TOTAL	Oahu	Hawaii	Maui County*	Kauai
	734	59	421	22	232

*Includes the islands of Maui, Molckai and Lanai

SUMMARY

The objective of the Vector Control Branch is to prevent and suppress outbreaks of vector-borne diseases and serious vector nuisances. This has been achieved through program activities designed to maintain vector population at low levels and to prevent the accidental introduction of new vector species.

The major activities of the Vector Control Branch for 1978 are given in Tables 1 and 3. Tables 2 and 4 include the details for the small mammal trapping and aircraft inspection activities.

Activities, which showed an increase over 1977 were number of service requests investigated, number of fishes stocked, number of small mammals trapped, mosquito breeding acres inspected and treated, and technical services and consultation. Activities which showed a decrease from 1977 were number of routine premises inspected, number of storm drains treated and number of airplanes inspected.

Table 2 presents the small mammals retrieval data by islands. This activity increased during 1978 on Hawaii and Maui while it decreased on Oahu during this same period.

Table 3 presents a summary of laboratory tests and examinations conducted to monitor the statewide status of plague, typhus and leptospirosis in the small mammal population. This activity showed a slight decrease in 1978.

Table 4 summarizes the types and numbers of insects and other arthropods recovered during inspections of aircraft arriving at the Honolulu International and Hilo airports by direct flights from abroad. The species of insects recovered (dead) are indicative of the potential hazard Hawaii faces from the encroachment of arthropod vectors. To minimize this threat, appropriate control and surveillance measures are maintained at the ports of entry.

TABLE 1

PRINCIPAL ACTIVITIES OF THE VECTOR CONTROL BRANCH ON THE ISLANDS OF OAHU, HAWAII, MAUI AND KAUAI STATE OF HAWAII, 1978

Activity	Total	Island			
		Oahu	Hawaii	Maui	Kauai
Premises Inspected	22,319	6,084	13,609	2,556	70
Vector Service Requests Investigated	4,497	2,574	1,196	606	121
Mosquitoes	1,016	742	164	93	17
Rats	2,263	1,012	803	372	76
Flies	241	192	17	25	7
Fleas	458	255	122	64	17
Others	519	373	90	52	4
Biological Control with Fishes* (no. stocked)	1,666,852	905,032	6,920	517,800	237,100
Total Small Mammals Trapped	20,306	444	10,154	9,708	0
Field Operation	18,739	438	8,646	9,655	0
Ports of Entry (piers & airport)	1,567	6	1,508	53	0
Vector Breeding Sources Abated					
Storm Drains Checked and Treated (number)	64,572	62,153	197	2,222	0
Mosquito Breeding & Other Areas Checked & Treated (acres)	56,412	7,604	19,584	16,486	12,738
Entomological Surveillance					
Mosquito Light Trap Stations	110	55	30	8	17
Fly Bait Stations	26	26	0	0	0
Other Vector Stations	6,483	1,903	4,580	0	0
Technical Service and Consultation Provided	12,053	7,901	3,352	1,253	800
Number of Airplanes Inspected	80	37	43	0	0

* *Gambusia*, *Poecilia* (*Lebistes*), *Tilapia*, etc.

TABLE 2

TOTAL SMALL MAMMAL RETRIEVALS BY AREA AND SPECIES STATE OF HAWAII, 1978

Island	Trap Days*	Total Small Mammal Retrievals	Species								
			Rattus					Mus musculus		H. auropunctatus	
			Total		exulans	norvegicus	rattus	Number	Percent	Number	Percent
			Number	Percent							
Total	349,568	20,306	13,251	65.25	3,855	1,129	8,267	5,758	28.36	1,297	6.39
Hawaii	188,431	10,154	4,830	47.57	1,064	1,048	2,718	4,131	40.68	1,193	11.75
Oahu	35,277	444	397	89.41	4	81	312	42	9.46	5	1.13
Maui	125,860	9,708	8,024	82.65	2,787	0	5,237	1,585	16.33	99	1.02
Kauai	0	0	0	---	0	0	0	0	---	0	---

* Trap days = No. traps X No. of days trapped

TABLE 3

SUMMARY OF LABORATORY ACTIVITIES AND FINDINGS BY AREA STATE OF HAWAII, 1978

Type of Zoonoses			Total	Geographic Area				
				Hawaii		Oahu	Maui[a]	Kauai
				West	East			
Plague		Macroscopic Exams of Small Mammals....	10,073	6,162	1,279	550	2,082	---
		Animal Inoculations........	---	---	---	---	---	---
		Bacteriologic Cultures.........	---	---	---	---	---	---
		No. of Burrows Examined.........	---	---	---	---	---	---
	Host Animals	No. Combed........	6,786	3,291	1,139	274	2,082	---
		No. Infested......	83	0	9	14	60	---
		Fleas Recovered.....	168	0	30	35	103	---
		No. of Serological Samples Collected..	1,059	400	385	274	0	---
		No. of Serological Determinations.....	429[b]	270	156	0	3	---
		No. of Positive Serum Samples......	0	0	0	0	0	---
Leptospirosis		No. of Animals Examined.........	276	---	---	276	---	---
		No. of Cultures Examined.........	298	---	---	298	---	---
		No. of Positive Animals-Culture.....	37	---	---	37	---	---
		Percent Positive by Culture.......	12.42	---	---	12.42	---	---
		No. of Culture Identifications.....	29	---	---	29	---	---
		No. of Serological Samples Collected..	276	---	---	276	---	---
		No. of Serological Determinations...	362	---	---	362	---	---
		No. of Positive Serum Samples....	4	---	---	4	---	---
		Percent Positive by Serology......	1.10	---	---	1.10	---	---
Murine Typhus		No. of Serological Samples Collected..	3,645	340	836	276	2,193	---
		No. of Serological Samples Examined...	3,109[b]	326	785	220	1,778	---
		No. of Positive Serum Samples....	940	68	115	39	718	---
		Percent Positive by Serology......	30.23	20.86	14.65	17.73	40.38	---

[a] Includes islands of Maui, Molokai, and Lanai.

[b] All serological determinations performed on Oahu.

TABLE 4

INSECTS RECOVERED IN AIRCRAFT ENTERING HAWAII BY MONTH
STATE OF HAWAII, 1978

Month	No. of Planes Inspected[a]	No. of Planes Harboring Mosquitoes	No. of Mosquitoes Recovered[b]	No. of Planes Harboring Flies	No. of Flies Recovered[c]	No. of Planes Harboring Other Medically Important Arthropods	No. of Other Medically Important Arthropods Recovered[d]
Total for Year	80	6	8	13	32	0	0
January........	15	1	1	2	10	0	0
February.......	10	2	4	4	14	0	0
March..........	4	0	0	0	0	0	0
April..........	4	0	0	1	1	0	0
May............	20	1	1	1	1	0	0
June...........	6	0	0	1	2	0	0
July...........	4	0	0	1	1	0	0
August.........	2	1	1	1	1	0	0
September......	4	1	1	1	1	0	0
October........	4	0	0	1	1	0	0
November.......	4	0	0	0	0	0	0
December.......	3	0	0	0	0	0	0

[a] Limited to spot-checking of incoming flights at the Honolulu International and Lyman Field (Hilo) Airports one day per week.

[b] Aircraft spot-checked to monitor compliance to State's disinsection requirement.

[c] Includes all medically important members belonging to the order of flies (Diptera) except the mosquitoes.

[d] Includes all medically important arthropods except members that belong to the order of flies (Diptera).

LITTER CONTROL PROGRAM

Summary

The Litter Control Program was established within the Department of Health pursuant to Act 2, First Special Session of the 1977 Legislature. The purpose of the Program is to promote, coordinate and implement litter control in the State through public education and awareness, streamlined enforcement, continuing voluntary anti-litter campaigns, and requirements for litter receptacles. In addition to 1978 calendar year statistics, some of the following tables include statistics dating back to August 1977 when the Program started.

Table 1 shows the number of groups and individuals that participated in the 1977 and 1978 Statewide Cleanup Campaigns. The amount of litter collected during the two cleanup campaigns are included. The Program has also assisted in many other cleanup projects.

The number of citizen reports of litter violations are indicated in Table 2. A LITTER HOTLINE program has been established on the islands of Oahu, Maui, and Kauai. Citizens may call the LITTER HOTLINES to report littered properties and motor vehicles causing litter. The Oahu LITTER HOTLINE is operated 24 hours a day. The island of Hawaii does not participate in the hotline program because of a lack of personnel. A litter control inspector investigates all reports of littered areas and appropriate action is taken to remove the reported litter. Letters are sent to owners of registered vehicles causing litter warning them of the reported violation. The letter also requests their support in eliminating the litter problem.

Table 3 shows the number of litter receptacles the Program has made available to community groups, state departments, schools, and the general public. Many of the litter receptacles were donated by private businesses.

Table 4 lists the various types of educational and promotional litter control materials distributed to organizations, agencies, firms and individuals. The total amounts distributed are shown by type of material. Note that seven issues of the Litter Control Program Newsletter were published in 1978 with a monthly circulation of 15,000.

Figure 1 illustrates the results of an informal survey of automobiles at sixteen sites on Oahu, Maui, and Kauai, primarily in shopping center parking lots. The survey was conducted two times to determine the percentage difference in the number of cars that carried litter containers before and after a statewide car litter bag project.

The project involved the distribution of 500,000 car litter bags to motorists from December 1 through December 15, 1978. Ten businesses donated the bags bearing the State Anti-Litter Symbol. They were distributed with the cooperation of the Hawaii Automotive and Retail Gasoline Dealers Association. Car litter bags bearing the State Anti-Litter Symbol were noted in the survey. The island of Hawaii was not surveyed because of a lack of personnel.

There was a 10.9% total increase in the number of cars that had a litter bag after December 17 as compared to cars surveyed prior to the car bag project. Of the 10.9% increase, 10.4% was due to the increase in number of cars carrying bags bearing the State Anti-Litter Symbol; thus, indicating a positive impact of the Statewide Car Litter Bag Project.

Table 5 shows the number of cars surveyed in the car litter bag survey.

Table 6 presents data from a public attitude survey regarding the problem of litter in Hawaii. The University of Hawaii was contracted to conduct the survey using a randomly selected telephone interview method. The margin of error was ±3.5% at the 95% confidence level for a dichotomous item at a 50-50 split. That is, if 50% of the respondents agreed with a statement, then between 53.5% and 46.5% of the adult population agreed with the statement.

Tables 7 and 8 compare Hawaii's litter rates and composition with litter in the states of Washington, California, Oregon, and Michigan.. Under contract, The Institute for Applied Research (IAR) conducted a litter item count survey in January 1978 at 35 selected sites on Oahu. The IAR conducted similar surveys in the other above mentioned states.

Table 7 shows fresh litter items per mile-week, accumulated litter items per mile, and square feet of accumulated litter per mile for the surveyed states. The data is listed in three site categories: rural state highways, commercial sites, and residential sites.

Table 8 divides the composition of litter into 17 categories. Hawaii's composition of litter is compared with those of the other states surveyed.

TABLE 1

STATEWIDE CLEANUP CAMPAIGNS
STATE OF HAWAII, OCTOBER 1977 and APRIL 1978

Statewide Cleanup Campaign Dates	Approximate No. of Participating Organizations	Approximate No. of Participating Individuals	Approximate No. of Pounds of Litter Collected
October 1 - 8, 1977	1,053	217,000	933,000
April 29 - May 6, 1978	880	160,000	800,000
Total	1,933	377,000	1,733,000

TABLE 2

CITIZEN REPORTS OF LITTER VIOLATIONS
STATE OF HAWAII, 1978

Type of Reported Violation	Island		
	Oahu[a]	Maui[b]	Kauai[c]
Littered Properties	355	89	17
Motor Vehicles Causing Litter	530	2	9
Total	885	91	26

[a] Includes reports received in December 1977.

[b] Reports of littered properties recorded from April 1978 and motor vehicles causing litter recorded from December 1978.

[c] Reports of motor vehicles causing litter recorded from September 1978.

TABLE 3

LITTER RECEPTACLES PROVIDED FOR PUBLIC USE STATE OF HAWAII, SEPTEMBER 1977 - DECEMBER 1978

Type of Receptacle	Approximate No. Provided
State Logo Car Litter Bags[a]	380,000
Plain Litter Bags (10 gallon capacity)[a]	13,000
Plain Litter Bags (30 gallon capacity)	4,400
State Logo Litter Bags (30 gallon capacity)	17,000
Metal Litter Receptacles (55 gallon capacity)[a]	660
Three Cubic Yard Dumpsters[a]	17[b]

a/ Provided in cooperation with private businesses, including donations.

b/ Oahu only, dumpster programs on Maui and Kauai are coordinated by private organizations.

TABLE 4

EDUCATIONAL AND PROMOTIONAL LITTER CONTROL MATERIALS DISTRIBUTED STATE OF HAWAII, SEPTEMBER 1977 - DECEMBER 1978

Type of Material	Total Amounts Distributed
Anti-litter Logo Decals	69,000
Brochures	10,500
Posters	9,500
Coloring Sheets	8,000
Litter Control Program Newsletter	105,000

TABLE 5

NUMBER OF CARS SURVEYED FOR CAR LITTER BAGS* STATE OF HAWAII, BEFORE NOVEMBER 17, 1978 AND AFTER DECEMBER 17, 1978

	No. of Cars Surveyed	
Island	Before	After
Oahu	2,906	3,115
Maui	656	523
Kauai	500	500
Total	4,062	4,138

*See Figure 1

TABLE 6

SUMMARY OF LITTER ATTITUDE SURVEY RESULTS STATE OF HAWAII, NOVEMBER 1978

Survey Questions	Results by Percentage
Do you think the State of Hawaii has a litter problem today?	Yes-88.2%
Is Hawaii's litter problem greater or less that it was two years ago?	Greater-43.3% Same-23.9% Less-17.7%
What do you think is Hawaii's biggest litter problem?	Cars/Highways-31.2% Parks/Public Places-30.5%
Do you feel the average citizen should be more responsible and cooperative to help control the litter problem?	Yes-95.2%
What group of people do you think cause the most litter?	Youth-21.0% Locals-19.2% Young Adults-14.7%
Have you seen or heard of any litter control advertisements recently?	Yes-53.9%
a. If yes, where?	a. TV-61.1% Posters-18.8% Newspapers-17.5% Radio-8.1% Shopping Bags-3.0%
b. What did you think of the advertisements?	b. Liked the ads-79.1%
Did you or a member of your family ever participate in a litter cleanup campaign?	Yes-33.5%

FIGURE I

PERCENTAGE OF CARS WITH LITTER BAGS AT SELECTED SITES ON OAHU, MAUI AND KAUAI STATE OF HAWAII, BEFORE NOVEMBER 17, 1978 AND AFTER DECEMBER 17, 1978

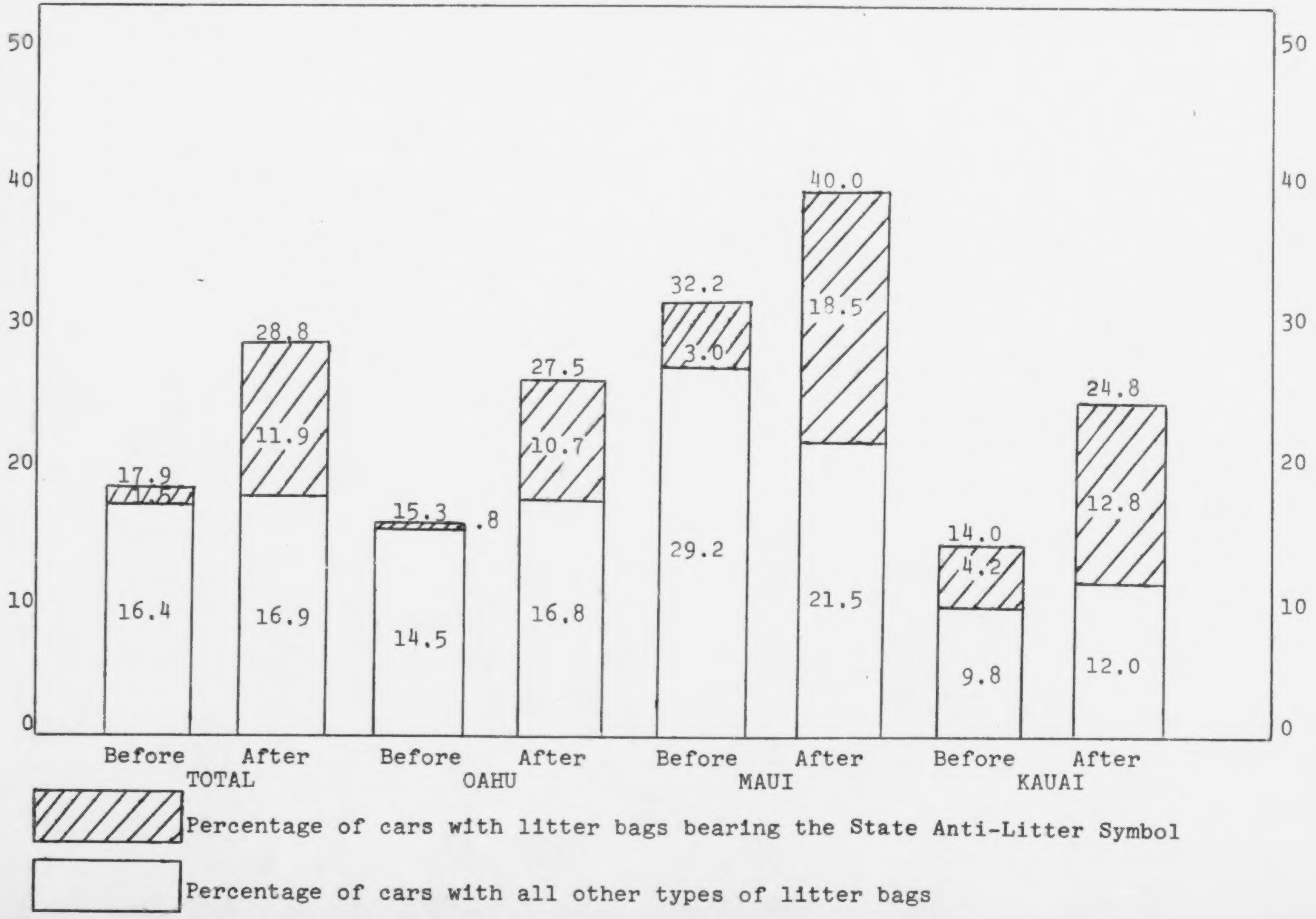

TABLE 7

LITTER RATE COMPARISON
HAWAII VS. OTHER STATES SURVEYED

State	Year	Rural State Highways	Commercial Sites	Residential Sites	Combined Avg. 3 Locales Only
FRESH LITTER[a] (items/mile)					
California	1975	261	1,304	401	655
Oregon	1977	209	1,413	324	645
Washington	1977	237	1,592	456	761
Michigan	1978	196	1,732	826	918
Hawaii	1978	936	1,647	769	1,115
ACCUMULATED LITTER[b] (items/mile)					
Oregon	1977	2,821	9,328	2,686	4,945
Washington	1977	3,196	7,641	3,284	4,707
Michigan	1978	2,646	14,375	3,799	6,940
Hawaii	1978	12,548	6,507	3,694	7,583
ACCUMULATED LITTER[c] (square feet/mile)					
Oregon	1977	423	488	213	375
Washington	1977	368	339	145	284
Michigan	1978	304	589	156	350
Hawaii	1978	695	400	161	418

---

a/ Litter found at the end of a one week interval.

b/ Long term litter buildup; corresponds to amount of litter the average pedestrian or motorist encounters on a typical day.

c/ The area of ground covered by litter when laid on a flat surface with minimum exposure of uncovered area and minimum overlap.

TABLE 8

FRESH LITTER PERCENTAGE COMPOSITION COMPARISON HAWAII VS. OTHER STATES SURVEYED

Litter Categories	Hawaii 1978	Michigan 1978	Washington 1977	California 1975	Oregon 1977
Beer, Soft Drink Cont.	8.9%	9.3%	3.3%	6.9%	1.9%
Juice, Wine, Liq. Cont.	.2	.4	.4	1.0	.5
Bottle Caps	2.8	3.2	4.4	1.4	5.3
Pull tabs	10.8	4.9	8.1	10.8	1.1
Cups, Lids, Straws	12.6	8.3	7.1	9.4	9.7
Carriers, Cartons, Labels	.1	.7	.5	1.3	.7
	35.4	26.8	23.8	30.8	19.2
Candy, Gum, Snacks	20.6	17.0	19.9	18.5	18.3
Take-Out Food Pkg.	1.5	2.2	2.1	2.1	1.9
Cig. Pkg., Matches, etc.	8.7	9.2	7.8	11.0	10.2
Napkins, Bags, Tissue, etc.	9.8	6.3	5.6	9.7	6.2
	40.6	34.7	35.4	41.3	36.6
Newspapers, Magazines	1.2	1.9	.6	.8	.6
Advertising	1.8	.5	.6	1.3	.6
Toiletries, Drugs, and Clothes	3.3	3.3	1.6	2.3	1.9
Milk, Food Pkg., Remnants	2.4	1.5	5.1	1.6	4.2
Vehicle Supplies, Debris	2.3	2.0	1.6	1.0	3.6
Construction Debris, etc.	1.3	1.1	.9	.6	1.4
	12.3	10.3	10.4	7.6	12.3
Other Prod., Unidentified	11.7	28.2	30.4	20.3	31.9
	100.0%	100.0%	100.0%	100.0%	100.0%

MEDICAL HEALTH SERVICES DIVISION

DIABETES SCREENING SURVEY
Chronic Disease Branch

Statistical Report - 1978

Table I shows the total number of persons screened and the new diabetics found by age and sex. The rate of new diabetics per 1,000 is 7.12 this year--a decrease from the 12.93 rate of last year. This is a result of the lower rate found in the 65-over group: 7.73/1,000, as compared with last year's rate of 17.46. Since this year Kauai was not screened, this may account for the smaller "65-over" figure, as Kauai screening usually yields a high number of new diabetics in this age range.

Table II shows the new diabetics in the various ethnic groups. As in previous years, Caucasian and Chinese showed the lowest yield, with Filipinos and Hawaiian-Part-Hawaiian the highest. The Japanese showed a much lower rate than previously.

Table III shows diabetes surveys by island. Maui County (Maui, Lanai and Molokai) showed twice as high a rate of new diabetics than Oahu and Hawaii.

TABLE I

DEPARTMENT OF HEALTH
CHRONIC DISEASE BRANCH

DIABETES SCREENING SURVEY BY AGE AND SEX FOR JULY, 1977 - JUNE, 1978

	POSITIVE SCREENEES									NEW DIABETICS					
	TOTAL SCREENED			NUMBER			PERCENT			NUMBER				RATE*	
	TOTAL	MALE	FEMALE	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F
ALL AGES	6,463	2,763	3,700	189	93	96	2.92	3.37	2.59	46	20	26	7.12	7.24	7.03
UNDER 25	378	155	223	0	0	0	0.00	0.00	0.00	0	0	0	0.00	0.00	0.00
25-44	1,442	527	915	15	7	8	1.04	1.33	.87	3	1	2	2.08	1.90	2.19
45-54	1,070	446	624	27	14	13	2.52	3.14	2.08	6	4	2	5.61	8.97	3.21
55-64	1,385	583	802	48	21	27	3.47	3.60	3.37	21	7	14	15.16	12.01	17.46
65-OVER	1,940	961	979	95	48	47	4.90	4.99	4.80	15	8	7	7.73	8.32	7.15
UNLISTED	248	91	157	4	3	1	1.61	3.30	.64	1	0	1	4.03	0.00	6.37

*No. of New Diabetics Per 1,000 Screened.

TABLE II

DEPARTMENT OF HEALTH
CHRONIC DISEASE BRANCH

DIABETES SCREENING SURVEY BY RACE AND SEX FOR JULY, 1977 - JUNE, 1978

	TOTAL SCREENED			POSITIVE SCREENEES						NEW DIABETICS					
				NUMBER			PERCENT			NUMBER			RATE*		
	TOTAL	MALE	FEMALE	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F
ALL RACES	6,463	2,763	3,700	163	79	84	2.52	2.86	2.27	47	21	26	7.27	7.60	7.03
JAPANESE	3,233	1,271	1.962	87	36	51	2.69	2.83	2.60	29	10	19	7.60	7.87	9.68
CAUCASIAN	1,206	519	687	20	15	5	1.66	2.89	.73	6	4	2	4.98	7.71	2.19
HAWAIIAN,PART-HA	154	68	86	5	4	1	3.25	5.88	1.16	2	1	1	12.99	14.71	11.63
CHINESE	373	185	188	4	2	2	1.07	1.08	1.06	2	2	0	5.36	10.81	0.00
FILIPINO	65	27	38	18	7	11	27.69	25.93	28.95	3	2	1	46.15	74.07	26.32
KOREAN	353	143	210	1	1	0	.28	.70	0.00	0	0	0	0.00	0.00	0.00
PUERTO RICAN	33	10	23	0	0	0	0.00	0.00	0.00	0	0	0	0.00	0.00	0.00
OTHER & UNSPEC.	1,046	540	506	28	14	14	2.68	2.59	2.77	5	2	3	4.78	3.70	5.93

*No. of New Diabetics Per 1,000 Screened.

TABLE III

DEPARTMENT OF HEALTH
CHRONIC DISEASE BRANCH

DIABETES SCREENING SURVEY BY ISLAND FOR JULY 1, 1977 - JUNE 30, 1978

LOCATION	TOTAL SCREENED	NO. POSITIVE DEXTROSTIX	NO. POSITIVE AUTOANALYZER	NEW DIABETICS	
				NUMBER	RATE PER 1000 SCREENED
OAHU	3,658	166	72	27	7.38
HAWAII	1,399	113	59	11	7.86
MAUI	654	39	18	12	18.35
MOLOKAI	397	45	22	6	15.11
LANAI	355	24	14	6	16.90
TOTAL	6,463	387	185	62	9.59

TABLE IV
CHRONIC DISEASE BRANCH

UTERINE CERVICAL CANCER SCREENING
Calendar Year 1977-1978

Year	Number Screened	Number Abnormal Findings Referred
1968	200	1
1969	771	28
1970	1,328	20
1971	1,470	1
1972	4,559	10
1973	5,388	12
1974	3,914	33
1975	2,863	19
1976	3,585	37
1977	3,329	90
1978	2,839	52

TABLE V
BLOOD PRESSURE SCREENING
Fiscal Year 1977-1978

Total Screened	5,154
Known Hypertensives	485
Number Abnormal Findings Referred (Includes some known hypertensives)	337

CARE HOME BY ISLANDS, TYPE AND BEDS

STATE OF HAWAII 1978

Number of Facilities and Beds								ISLAND AND TYPE OF CARE HOME					
	TOTAL			HAWAII		KAUAI		MAUI		MOLOKAI		OAHU	
	GRAND TOTAL	Residential	Family	Residential	Family	Residential	Family	Residential	Family	Residential	Family	Residential	Family
Number of Facilities	264	15	249	1	12	2	13	0	10	*1 Kalaupapa	3	10	208
Number of Beds	1460	497	963	14	42	45	113	0	37	52	12	386	759

* Kalaupapa

Residential Care Homes (formerly Institutional) = Care Homes with five or more beds.
Family Care Homes (formerly Residential) = Care Homes with four or less beds.

During this past year, 21 family care homes were established on Oahu with 72 beds; Maui, 2 homes with 8 beds; Kauai, 2 homes with 8 beds, and Hawaii, 2 homes with 6 beds, for a total of 94 beds.

During the past year, 4 residential care homes closed on Oahu: King's Daughters, Lavada, Nacion and Rose's Leisure Home, with a loss of 127 beds. Of these, the latter two were sold to new owners, reestablishing 40 beds. Hilo Life Center converted their 63 beds to an Intermediate Care Facility. Also, 4 residential care homes changed to the new category of "Special Treatment Facility." This was a total of 84 beds.

Care homes are homes or residential institutions in which people may obtain 24-hour care if they need personal services, supervision or assistance essential for sustaining the activities of daily living. Family care homes are those in which the residents share a home with a family.

H&MFB
7/15/79

LABORATORY SERVICES

To enhance the effectiveness of health programs in the State of Hawaii, laboratory services are provided to other Department of Health programs and other governmental agencies for the diagnosis, treatment, surveillance and/or prevention of disease and for the control of water pollution and harmful food and drugs; and to private physicians and institutions for the diagnosis, treatment and/or evidence of disease state in their patients.

These laboratory services involve clinical microbiology, food microbiology, sanitary microbiology, virology, serology, food and drug chemistry, sanitary chemistry, clinical chemistry, air pollution monitoring, pesticide analysis and toxicology.

The major concern of the Laboratories Branch is the ever increasing demand for laboratory services with our limited resources.

TABLE I

NUMBER OF EXAMINATIONS PERFORMED AND FUNDS EXPENDED BY LABORATORIES BRANCH, FY 1975-78

	FY 1975	FY 1976	FY 1977	FY 1978
Number of Examinations Performed	432,026	456,965	490,420	488,330
Funds Expended:				
General Funds	544,409	623,591	757,377	797,354
Federal Funds	177,403	150,240	149,295	117,985
Total Funds Expended	721,812	773,831	906,672	915,339
Average Cost Per Examination	1.67	1.69	1.85	1.87

Table I shows the following trends:

1. During the period of FY 1975-78, the number of examinations performed by the branch increased by 56,303 or 13%.
2. During the period of FY 1975-78, the total funds expended by the branch increased by $193,527 or 27%.
3. During the period of FY 1975-78, the average cost for examinations increased by $0.20 or 12%.
4. During the period of FY 1977-78, the number of examinations performed by the branch decreased by 2,090 or .004%. This decrease is attributed to the restriction imposed on private physicians from sending specimens for Streptococcal examination in order for the branch to meet the new demands for services by the programs, the new State and Federal Drinking Water Act, and the State's aquaculture program.

Another function of the Laboratories Branch is in the area of laboratory improvement. In FY 1978, the Branch provided bench training to 12 medical technologists and sponsored two (2) workshops which were attended by 38 laboratory personnel.

TABLE 1

NUMBER OF SPECIMENS SUBMITTED TO VARIOUS UNITS OF THE LABORATORIES BRANCH AND NUMBER OF BACTERIOLOGICAL PARASITOLOGICAL, SEROLOGICAL AND CHEMICAL EXAMINATIONS PERFORMED UPON THEM BY TYPE OF SPECIMEN AND ISLAND

STATE OF HAWAII, 1978

Disease or Specimens	All Laboratories		ISLAND							
			Oahu		Hawaii		Maui		Kauai	
	Specimens	Examinations	Specimens	Examinations	Specimens	Examinations	Specimens	Examinations	Specimens	Examinations
Total	297,919	488,331	235,102	397,971	22,736	40,674	29,904	38,022	10,177	11,664
Microbiology										
Enteric	8,787	28,756	5,445	22,783	536	1,002	2,736	4,754	70	217
Gonorrhea	123,006	107,482	107,927	95,799	4,588	3,487	7,694	5,894	2,797	2,302
Staphylococcus Phage Typing	1,419	4,325	1,419	4,325	-	-	-	-	-	-
Streptococcus	45,274	52,282	23,658	25,863	7,199	11,466	11,066	11,526	3,351	3,427
Tuberculosis	9,165	42,454	7,795	38,107	1,370	4,347	-	-	-	-
Miscellaneous Bacteriology	3,544	25,346	2,717	20,278	291	1,643	518	3,347	18	78
Mycology	756	2,067	445	1,637	261	271	49	158	1	1
Parasitology	4,007	12,218	1,605	4,847	1,314	4,001	926	2,852	162	518
Viral Isolation	2,108	9,675	2,108	9,675	-	-	-	-	-	-
Serology: Syphilis	31,211	34,459	21,145	26,198	3,326	2,723	4,444	3,718	2,296	1,820
Non-Syphilis	362	982	195	489	148	458	19	35	-	-
Viral & Rickettsia	19,603	38,883	19,603	38,883	-	-	-	-	-	-
Other Clinical	254	1,800	73	51	181	1,749	-	-	-	-
Sanitary Microbiology										
Drinking Water	5,667	13,699	732	1,902	2,320	5,905	1,710	4,007	905	1,885
Pollution Monitoring	1,252	5,312	643	3,148	274	1,046	125	444	210	674
Food Products	3,219	9,396	2,204	6,706	403	1,392	432	844	180	454
Food Poisoning	98	615	98	615	-	-	-	-	-	-
Sanitary Chemistry										
Drinking Water	249	5,241	176	5,185	73	56	-	-	-	-
Pollution Monitoring	778	19,842	778	19,842	-	-	-	-	-	-
Food Products	2,577	14,419	1,929	12,684	276	1,004	185	443	187	288
Pesticide	97	8,209	97	8,209	-	-	-	-	-	-
Toxicology	15	781	15	781	-	-	-	-	-	-
Clinical Chemistry	7,102	9,568	6,926	9,444	176	124	-	-	-	-
Air Pollution Chemistry ...	27,369	40,520	27,369	40,520	-	-	-	-	-	-

TABLE 2

INCIDENCE OF SALMONELLA BY TYPE, SYMPTOMS AND AGE OF INDIVIDUALS AFFECTED CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Group	Serotypes	All Ages			Age of Individuals Harboring Salmonella											
		Total Number of Individuals			Less than 6 Months		6 Months to One Year		One Year to 3 Years		3 Years to 10 Years		10 Years to 20 Years		20 Years and Over	
		Total	S	AS	S	AS	S	AS	S	AS	S	AS	S	AS	S	AS
		467	432	35	92	2	82	-	58	2	45	9	33	4	122	18
A	paratyphi A	6	6	-	-	-	-	-	-	-	-	-	-	-	6	-
B	agona	14	14	-	-	-	1	-	3	-	4	-	2	-	4	-
	bredeney	2	2	-	1	-	1	-	-	-	-	-	-	-	-	-
	derby	14	13	1	3	-	4	-	2	-	-	-	-	-	4	1
	heidelberg	11	11	-	2	-	2	-	1	-	1	-	1	-	4	-
	java	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-
	reading	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-
	saint paul	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-
	schwarzengrund	3	3	-	1	-	-	-	1	-	1	-	-	-	-	-
	typhimurium	48	42	6	10	-	4	-	12	-	6	3	-	-	10	3
	typhimurium var. copenhagen ...	16	14	2	2	-	3	-	2	-	1	-	2	1	4	1
C_1	birkenhead	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
	braenderup	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-
	infantis	20	17	3	4	-	-	-	3	-	3	1	-	1	7	1
	lille	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-
	montevideo	5	5	-	-	-	-	-	-	-	-	-	2	-	3	-
	ohio	2	1	1	-	-	1	-	-	-	-	-	-	-	-	1
	oslo	11	11	-	1	-	2	-	2	-	-	-	3	-	3	-
	roterberg	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-
	tennessee	3	3	-	-	-	1	-	1	-	1	-	-	-	-	-
	thompson	3	2	1	-	-	-	-	1	-	-	-	1	-	-	1
	virchow	3	3	-	-	-	1	-	1	-	-	-	-	-	1	-

TABLE 2 (continued)

INCIDENCE OF SALMONELLA BY TYPE, SYMPTOMS AND AGE OF INDIVIDUALS AFFECTED CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Group	Serotypes	All Ages			Age of Individuals Harboring Salmonella											
		Total Number of Individuals			Less than 6 Months		6 Months to One Year		One Year to 3 Years		3 Years to 10 Years		10 Years to 20 Years		20 Years and Over	
		Total	S	AS	S	AS	S	AS	S	AS	S	AS	S	AS	S	AS
C_2	albany	3	3	-	-	-	-	-	2	-	-	-	-	-	1	-
	blockley	2	2	-	-	-	1	-	-	-	-	-	-	-	1	-
	bovis morbificans	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-
	litchfield	4	4	-	-	-	-	-	1	-	-	-	2	-	1	-
	manhattan	12	12	-	2	-	5	-	2	-	2	-	-	-	1	-
	muenchen	5	5	-	-	-	2	-	-	-	-	-	-	-	3	-
	newport	23	22	1	2	-	7	-	4	-	1	1	2	-	6	-
D	enteritidis	10	9	1	-	1	2	-	1	-	3	-	2	-	1	-
	panama	35	34	1	4	-	5	-	7	-	7	1	-	-	11	-
	panama & derby	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-
	typhi, phage type A	4	3	1	-	-	-	-	-	-	3	-	-	-	-	1
	typhi, phage type D_2	1	-	1	-	-	-	-	-	-	-	-	-	-	-	1
	typhi, phage type E_1	27	20	7	1	1	2	-	4	1	3	2	6	1	4	2
	typhi, phage type L_1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
	typhi, phage type M_1	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-
	typhi, W-form	7	6	1	-	-	2	-	1	-	2	-	-	1	1	-
E_1	anatum	4	4	-	-	-	1	-	-	-	1	-	1	-	1	-
	give	12	12	-	6	-	4	-	-	-	-	-	-	-	2	-
	london	2	2	-	1	-	-	-	-	-	-	-	1	-	-	-
	meleagridis	2	1	1	1	-	-	-	-	-	-	-	-	-	-	1
	weltevreden	120	114	6	43	-	24	-	5	1	1	1	5	-	36	4
E_2	binza	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
	lanka	3	3	-	-	-	1	-	-	-	-	-	1	-	1	-
	new brunswick	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-
	newington	2	1	1	-	-	-	-	-	-	1	-	-	-	-	1
E_4	senftenberg	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-
F	aberdeen	4	4	-	1	-	2	-	-	-	-	-	1	-	-	-
G	cubana	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-
	worthington	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
K	cerro	6	6	-	2	-	3	-	-	-	-	-	-	-	1	-
I	hvittingfoss	2	2	-	-	-	-	-	-	-	1	-	-	-	1	-

S = Symptomatic
AS = Asymptomatic

TABLE 3

SALMONELLA SEROTYPES IDENTIFIED FROM NONHUMAN SOURCES
CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Group	Salmonella	Total	Per Cent	Source															
				Animal Feed	Avian	Bovine	Chicken	Environmental Specimens*	Equine	Feline	Gekko	Ham	Meat Market Equipment	Monkey	Oyster Algal Pond	Oyster Trench	Porcine	Pork	Shellfish
	Total	707	100.0	63	11	13	4	17	3	1	3	1	57	3	2	1	519	7	2
	agona	14	2.0	2	1	-	-	2	-	-	-	-	-	-	-	-	9	-	-
	agona and london	2	0.3	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-
	agona, london and panama ..	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	bredeney	2	0.3	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-
	bredeney and binza	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	derby	130	18.4	3	-	1	-	1	-	-	-	-	9	-	-	-	114	2	-
	derby and typhimurium	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	derby and albany	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	derby and manhattan	11	1.6	-	-	-	-	-	-	-	-	-	2	-	-	-	9	-	-
	derby and london	6	0.8	-	-	-	-	1	-	-	-	-	-	-	-	-	4	1	-
	derby and new brunswick ...	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
B	derby and panama	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	derby and senftenberg	2	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-
	derby and worthington	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	derby and cerro	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	heidelberg	11	1.6	-	-	-	1	-	-	-	-	1	1	-	-	-	8	-	-
	typhimurium	41	6.0	-	1	-	-	-	-	-	-	-	7	-	-	-	32	1	-
	typhimurium and montevideo .	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	typhimurium and manhattan ..	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
B	typhimurium var. copenhagen	5	0.7	-	-	3	-	-	-	-	-	-	-	-	-	-	2	-	-
	typhimurium var. copenhagen and panama	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	saint-paul	5	0.7	-	3	-	-	-	-	-	-	-	-	-	-	-	2	-	-
	bareilly	5	0.7	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	bareilly and meleagridis ...	1	0.1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	infantis	2	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-
	livingstone	2	0.3	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-
C_1	ohio	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	oranienburg	15	2.2	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	tennessee	1	0.1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	thompson	2	0.3	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
	typhisuis	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	lille	1	0.1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C_2	albany	4	0.6	-	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
	chailey	3	0.4	-	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-

*Includes non-potable water samples.

TABLE 3 (continued)

SALMONELLA SEROTYPES IDENTIFIED FROM NONHUMAN SOURCES
CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Group	Salmonella	Total	Per Cent	Source															
				Animal Feed	Avian	Bovine	Chicken	Environmental Specimens*	Equine	Feline	Gekko	Ham	Meat Market Equipment	Monkey	Oyster Algal Pond	Oyster Trench	Porcine	Pork	Shellfish
C_2	corvallis	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	corvallis and worthington ...	1	0.1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	duesseldorf	1	0.1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	manhattan	85	12.1	-	-	4	-	-	-	-	-	-	5	-	-	-	76	-	-
	manhattan and panama	2	0.3	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-
	manhattan and london	2	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-
	manhattan and meleagridis ...	6	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-
	manhattan and orion	1	0.1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
	manhattan and saint-paul	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	manhattan and worthington ...	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
D	enteritidis	1	0.1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	panama	87	12.3	-	-	-	-	2	-	-	-	-	2	-	-	-	83	-	-
	panama and lanka	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	panama and london	3	0.4	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-
	panama and meleagridis	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	panama and weltevreden	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
E_1	anatum	6	0.8	1	1	1	-	-	-	-	-	-	-	-	-	-	3	-	-
	give	2	0.3	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-
E_1	london	63	9.0	-	-	-	-	-	-	-	-	-	17	-	-	-	45	1	-
	meleagridis	51	7.4	1	-	2	-	-	-	-	-	-	6	3	-	-	37	2	-
	mokola	5	0.7	-	1	-	-	2	-	-	-	-	-	-	1	-	-	-	1
	orion	1	0.1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	uganda	3	0.4	-	-	-	2	-	-	-	-	-	-	-	-	-	1	-	-
	weltevreden	27	4.0	1	-	1	-	3	2	1	3	-	-	-	1	1	13	-	1
E_2	binza	5	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-
	drypool	7	1.0	2	-	-	-	-	-	-	-	-	1	-	-	-	4	-	-
	lanka	12	1.7	-	-	-	-	3	-	-	-	-	-	-	-	-	9	-	-
	thomasville	3	0.4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	thomasville and senftenberg .	2	0.3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	westhampton	1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
E_4	senftenberg	13	1.9	8	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-
G	worthington	20	3.0	11	-	-	-	-	-	-	-	-	3	-	-	-	6	-	-
K	cerro	13	1.9	4	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-

*Includes non-potable water samples.

TABLE 4

INCIDENCE OF SHIGELLA BY TYPE, SYMPTOMS AND AGE OF INDIVIDUALS AFFECTED
CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Group	Serotypes	All Ages			Age of Individuals Harboring Shigella											
		Total Number of Individuals			Less than 6 Months		6 Months-less than One Year		One Year-less than 3 Years		3 Years-less than 10 Years		10 Years-less than 20 Years		20 Years and Over	
		Total	S	AS	S	AS	S	AS	S	AS	S	AS	S	AS	S	AS
		126	120	6	2	-	5	-	27	-	28	2	5	1	53	3
A	dysenteriae 1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
	dysenteriae 2	2	2	-	-	-	-	-	-	-	-	-	-	-	2	-
	dysenteriae 3	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
B	flexneri 1a	11	11	-	-	-	1	-	3	-	2	-	1	-	4	-
	flexneri 1b	10	9	1	-	-	-	-	1	-	2	-	2	-	4	1
	flexneri 2a	42	37	5	2	-	1	-	10	-	12	2	-	1	12	2
	flexneri 3	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-
	flexneri 4a	11	11	-	-	-	-	-	2	-	3	-	1	-	5	-
	flexneri 4b	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
	flexneri 5	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-
	flexneri 6	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-
D	sonnei 1	39	39	-	-	-	3	-	10	-	6	-	-	-	20	-
	sonnei 2	5	5	-	-	-	-	-	1	-	2	-	-	-	2	-

S = Symptomatic
AS = Asymptomatic

TABLE 5

INCIDENCE OF ENTEROPATHOGENIC E. COLI BY TYPE AND AGE OF INDIVIDUALS AFFECTED CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Serotypes	All Ages		Age of Individuals Harboring E. coli					
	Number	Per Cent	Under One Month	One Month-Under Three Months	Three Months-Under Six Months	Six Months-Under One Year	One Year-Under Two Years	Two Years and Over
E. coli Total	55	100.0	1	1	10	12	15	16
018;K77	13	23.6	1	-	4	1	-	7
020;K61	3	5.5	-	-	-	-	1	2
020;K84	1	1.8	-	-	-	-	-	1
026;K60	2	3.6	-	-	-	1	1	-
028;K73	3	5.5	-	-	1	-	-	2
044;K74	1	1.8	-	-	-	-	-	1
055;K59	3	5.5	-	-	-	1	2	-
086;K61	8	14.5	-	-	2	2	3	1
0111;K58	4	7.4	-	-	-	3	-	
0112;K66	2	3.6	-	-	-	1	-	1
0125;K70	1	1.8	-	-	-	-	1	-
0126;K71	6	10.9	-	-	2	1	3	-
0127;K63	2	3.6	-	1	-	1	-	-
0128;K67	6	10.9	-	-	1	1	4	-

TABLE 6

INCIDENCE OF PARASITES IN STOOLS RECEIVED FROM SELECTED SOURCES
CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Parasites	Source									
	Total	Physicians, Hospitals and Others	Public Health Nursing	Public Clinics	Water Reserve and Foodhandlers	Total	Physicians, Hospitals and Others	Public Health Nursing	Public Clinics	Water Reserve and Foodhandlers
	Number of Individuals Harboring Parasites					Number of Specimens Yielding Parasites				
Total	310	124	52	133	1	340	142	57	140	1
Entamoeba histolytica	3	-	-	3	-	3	-	-	3	-
E. histolytica, hookworm and Trichuris trichiura	4	-	1	3	-	4	-	1	3	-
E. histolytica and Entamoeba hartmanni	2	1	1	-	-	2	1	1	-	-
E. histolytica and Entamoeba coli	1	1	-	-	-	1	1	-	-	-
E. histolytica, E. coli, Endolimax nana and Giardia lamblia	1	1	-	-	-	1	1	-	-	-
Entamoeba hartmanni	3	1	2	-	-	3	1	2	-	-
E. hartmanni, E. coli and E. nana	1	-	-	1	-	1	-	-	1	-
E. hartmanni and G. lamblia	1	-	1	-	-	1	-	1	-	-
E. hartmanni and E. coli	1	1	-	-	-	1	1	-	-	-
E. hartmanni, E. nana and Iodamoeba butschlii	1	1	-	-	-	1	1	-	-	-
Giardia lamblia	27	13	5	9	-	32	15	7	10	-
G. lamblia and Chilomastix mesnili	3	3	-	-	-	5	5	-	-	-
Entamoeba coli	17	8	1	8	-	20	10	1	9	-
Endolimax nana	6	3	-	2	1	6	3	-	2	1
Ascaris lumbricoides	21	5	5	11	-	26	6	7	13	-
A. lumbricoides and hookworm	6	-	-	6	-	6	-	-	6	-
A. lumbricoides and T. trichiura	31	8	11	12	-	32	9	11	12	-
A. lumbricoides, hookworm and T. trichiura	17	9	1	7	-	17	9	1	7	-
A. lumbricoides, hookworm, T. trichiura and G. lamblia	2	1	1	-	-	2	1	1	-	-
A. lumbricoides, hookworm, T. trichiura and E. coli	1	-	-	1	-	1	-	-	1	-
A. lumbricoides, hookworm, T. trichiura, E. coli and E. nana	1	-	1	-	-	1	-	1	-	-
A. lumbricoides, T. trichiura and G. lamblia	3	-	-	3	-	3	-	-	3	-
A. lumbricoides, T. trichiura and E. coli	1	-	-	1	-	1	-	-	1	-
A. lumbricoides, T. trichiura and Balantidium coli	1	-	-	1	-	1	-	-	1	-
A. lumbricoides and E. nana	2	-	1	1	-	2	-	1	1	-
A. lumbricoides and E. coli	1	-	-	1	-	1	-	-	1	-
Clonorchis sinensis	1	1	-	-	-	1	1	-	-	-
C. sinensis and Strongyloides stercoralis	1	1	-	-	-	2	2	-	-	-
Enterobius vermicularis	6	6	-	-	-	6	6	-	-	-
Hookworm	13	7	-	6	-	14	6	-	8	-
Hookworm and T. trichiura	41	16	5	20	-	47	20	6	21	-
Hookworm, T. trichiura and G. lamblia	1	-	1	-	-	1	-	1	-	-
Hookworm, T. trichiura and E. coli	4	3	-	1	-	4	3	-	1	-
Hookworm, T. trichiura and E. nana	2	-	-	2	-	2	-	-	2	-
Hookworm, T. trichiura, E. coli and S. stercoralis	1	1	-	-	-	1	1	-	-	-
Hookworm, E. coli and S. stercoralis	1	1	-	-	-	1	1	-	-	-
Hookworm and E. coli	2	1	-	1	-	3	2	-	1	-
Hookworm and G. lamblia	1	1	-	-	-	1	1	-	-	-
Strongyloides stercoralis	2	2	-	-	-	2	2	-	-	-
Taenia sp.	1	1	-	-	-	5	5	-	-	-
Trichuris trichiura	55	21	9	25	-	55	21	9	25	-
T. trichiura and G. lamblia	2	1	1	-	-	2	1	1	-	-
T. trichiura, G. lamblia and E. coli	1	-	-	1	-	1	-	-	1	-
T. trichiura, G. lamblia and C. sinensis	1	1	-	-	-	2	2	-	-	-
T. trichiura, E. vermicularis, E. hartmanni and E. coli	1	-	1	-	-	1	-	1	-	-
T. trichiura and E. coli	8	3	1	4	-	8	3	1	4	-
T. trichiura, E. coli and E. nana	3	-	3	-	-	3	-	3	-	-
T. trichiura and E. nana	4	1	-	3	-	4	1	-	3	-

Number of Specimens Examined: 1,685

TABLE 7

INCIDENCE OF GRAM NEGATIVE DIPLOCOCCUS FROM SUSPECTED GONORRHEA CASES CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Smear	Culture			
	Total	Positive***	Negative	Not Done
Total	99,372*	4,127**	95,216	29
Positive	6	1	1	4
Negative	70	5	40	25
Not Done	99,296	4,121	95,175	0

*Includes 45,994 cultures examined by the Hawaii Gonorrhea Control Project of which 340 (0.74%) were positive for Neisseria gonorrhoeae.

**Neisseria gonorrhoeae recovered from 3,803 diagnostic cultures from the following sites:

Urethra	2,067	Eye	2	Labia	1	Skin	1
Cervix	739	IUD	2	Lesion	1	Wrist Joint Fluid	1
Rectum	487	Penis	2	Perianal	1	Unspecified	46
Oral	436	Blood	1	Prostatic Massage	1		
Vagina	13	Endometrial Washing	1	Right Ankle	1		

***All cultures were confirmed as Neisseria gonorrhoeae biochemically or by the fluorescent antibody test.

A total of two hundred and sixty three (263) treatment failure cultures from two hundred and fourteen (214) individuals were examined for beta lactamase (penicillinase) producing Neisseria gonorrhoeae. Of this number, thirty four (34) from twenty five (25) individuals were positive.

TABLE 8

INCIDENCE OF MYCOBACTERIA FROM HUMAN SOURCES
CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Mycobacterium	Total	Specimen Source																	
		Sputum	Abscess	Bronchial	Cervical Node	Foot Exudate	Gastric	Knee Aspirate	Leg	Lung Tissue	Lung Washing	Lymph Node	Lymph Node Exudate	Pleural Tissue	Scrotum	Stomach Lavage	Thoracentesis Fluid	Ureter	Urine
Total	840	794	2	9	2	2	3	1	2	4	1	1	1	1	1	1	1	2	12
tuberculosis	253	231	1	3	2	1	1	1	-	2	-	-	-	1	1	-	1	1	7
Group I (Photochromogen)																			
kansasii	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
marinum	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Group II (Scotochromogen)																			
flavescens	18	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gordonae	180	177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
scrofulaceum	45	43	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
szulgai	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Group III (Nonphotochromogen)																			
avium-intracellular complex	162	156	-	2	-	-	-	-	-	2	1	-	-	-	-	1	-	-	-
gastri	7	6	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
terrae complex	33	32	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
triviale	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
xenopi	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Group IV (Rapid Grower)																			
chelonei	32	27	-	2	-	-	-	-	1	-	-	-	1	-	-	-	-	-	1
fortuitum	102	98	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
chromogenic	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number of Specimens Examined: 9,585

TABLE 9

VIRAL ISOLATIONS
CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

TYPE OF SPECIMENS		NUMBER OF SPECIMENS		NUMBER OF EXAMINATIONS
	Received	Positive	Negative	
TOTAL	1,959	320	1,639	2,279
Throat Swabs	1,335	201	1,134	1,536
Fecal	93	5	88	98
Spinal Fluid	93	3	90	96
Blood	5	1	4	6
Tissue	16	6	10	22
Other	413	104	309	517
Animal Source	2	0	2	2

VIRAL AGENTS ISOLATED:

Throat Swabs:	NUMBER ISOLATED
Adenovirus Type (?)	15
Coxsackievirus Type A-9	2
Coxsackievirus Type B-1	1
Coxsackievirus Type B-2	1
Coxsackievirus Type B-3	9
Coxsackievirus Type B-5	6
ECHOvirus Type 4	1
ECHOvirus Type 9	19
ECHOvirus Type 30	4
Herpesvirus hominis	7
Influenza A/Texas-like (H3N2)	66
Influenza A/USSR-like (H1N1)	55
Influenza A/Victoria-like (H3N2)	4
Influenza B/Hong Kong-like	1
Parainfluenza Type 2	2
Parainfluenza Type 3	8
Rectal/Fecal Specimens:	
Adenovirus Type (?)	1
Coxsackievirus Type B-4	1
Coxsackievirus Type B-5	1
ECHOvirus Type 30	1
Poliovirus Type 3	1
Cerebrospinal Fluids:	
Coxsackievirus Type A-9	1
Coxsackievirus Type B-5	1
ECHOvirus Type 9	1
Tissue Specimens:	
Herpesvirus hominis	6
Other specimens:	
Coxsackievirus Type A-16	1 (Vesicular fluid)
Herpesvirus hominis	103 (100 Genital region, 2 Skin Blisters, 1 Breast)
Blood Specimen:	
Coxsackievirus Type B-4	1

TABLE 10

DIAGNOSTIC SPECIMENS RECEIVED FOR VIRAL ISOLATION
CENTRAL LABORATORY ON OAHU

STATE OF HAWAII, 1978

Type of Specimens	Number of Specimens			Number of Examinations
	Received	Positive	Negative	
Total	1,959	320	1,639	2,279
Throat Swabs	1,335	201	1,134	1,536
Fecal	93	5	88	98
Spinal Fluid	93	3	90	96
Blood	5	1	4	6
Tissue	16	6	10	22
Other	413	104	309	517
Animal Source	2	0	2	2

VIRAL AGENTS ISOLATED AND/OR IDENTIFIED

Specimen	Virus	Type	Number of Isolations
Throat Swabs	Adenovirus	(?)	15
	Coxsackievirus	A-9	2
	"	B-1	1
	"	B-2	1
	"	B-3	9
	"	B-5	6
	ECHOvirus	4	1
	"	9	19
	"	30	4
	Herpesvirus hominis	-	7
	Influenza	A/Texas-like (H3N2)	66
	"	A/USSR-like (H1N1)	55
	"	A/Victoria-like (H3N2)	4
	"	B/Hong Kong-like	1
	Parainfluenza	2	2
	"	3	8
Rectal/Fecal	Adenovirus	(?)	1
	Coxsackievirus	B-4	1
	"	B-5	1
	ECHOvirus	30	1
	Poliovirus	3	1
Cerebrospinal Fluids	Coxsackievirus	A-9	1
	"	B-5	1
	ECHOvirus	9	1
Tissue	Herpesvirus hominis	-	6
Other	Coxsackievirus	A-16	1 (Vesicular fluid)
	Herpesvirus hominis	-	103 (100 Genital regio 2 Skin Blisters, 1 Breast)
Blood	Coxsackievirus	B-4	1

SUMMARY

The Public Health Nursing Branch supports all health programs in the Department of Health, in other city, county and state departments, and in private and community health care facilities, by providing consultation and generalized comprehensive distributive nursing health care services to consumers of health who are referred and/or request such services.

The goal of the program is to assist individuals, families, and communities to acquire self-sufficiency in meeting identified nursing health care needs. Services are provided to individuals and families at their place of residence, in clinics, day care centers, adult care homes, neighborhood centers and schools. As reflected in the tables, 36,243 cases were admitted to the service totaling 132,661 visits, statewide. In addition to visits in the field, 129,217 cases attended 8,416 clinic sessions, statewide.

The public health nursing activities include case management, casefinding though source/contact investigation, health assessment, immunization, teaching, demonstrating care, parenting, nutrition, child health guidance, preventive mental health, and referral to other agencies when needed.

Through federal funding home health services are provided to residents living on the islands of Molokai and Lanai. Public health nursing services to the abused and high-risk adults are provided to cases on Oahu through a Title XX Purchase of Services contract with the Department of Social Services and Housing.

Table I

CASES ADMITTED TO PUBLIC HEALTH NURSING SERVICE AND VISITS MADE BY COUNTY
STATE OF HAWAII, 1978

Type of Home Nursing Service	State		Honolulu		Hawaii		Kauai		Maui	
	Cases a/	Visits b/	Cases	Visits	Cases	Visits	Cases	Visits	Cases	Visits
Total	36,243	132,661	21,904	83,180	5,671	16,257	2,770	7,332	5,898	25,892
Maternity	1,047	2,305	767	1,748	125	175	34	49	121	333
Infant & Preschool Child Health	12,028	42,385	7,810	31,430	2,129	4,426	524	1,089	1,565	5,440
School Age Child c/	2,555	6,674	1,963	5.195	201	454	86	167	305	858
Adult Health	4,454	8,736	2,888	5,508	504	644	496	1,054	566	1,530
Tuberculosis d/	10,437	28,208	5,352	10,993	1,802	5,761	1,329	2,823	1,954	8,631
Other Communicable Diseases d/	514	1,494	131	513	152	313	17	54	214	614
Mentally Retarded	180	1,731	151	1,456	11	143	2	15	16	117
Other Developmental Disabilities	1,220	11,523	742	8,343	177	1,119	30	219	271	1,842
Other Crippled Children	1,557	14,246	695	8,346	455	2,534	102	1,129	305	2,237
Chronic Diseases	1,753	9,160	1,008	4,810	98	406	136	593	511	3,351
Emotional Problems	352	1,567	294	1,138	5	29	6	94	47	306
All Others	146	942	103	659	12	53	8	20	23	210
Not Home Not Found	...	3,690	...	3,041	...	200	...	26	...	423

a/ Cases: Individuals admitted to nursing service for a particular condition.

b/ Visits: Personal contacts with health content which take place in a home or the nurse's office.

c/ Health Guidance Only. Excludes visits to school children in other diagnostic categories.

d/ Includes diagnosed cases and contacts.

... Not applicable.

Table 2

CLINICS CONDUCTED BY PUBLIC HEALTH NURSING SERVICE BY TYPE OF CLINIC, NUMBER OF SESSIONS AND ATTENDANCE BY COUNTY STATE OF HAWAII, 1978

Type of Clinic	State		Honolulu		Hawaii		Kauai		Maui	
	Session	Attendance	Session	Attendance	Session	Attendance	Session	Attendance	Session	Attendance
Total	8,416	129,217	4,888	76,567	1,549	15,513	543	12,210	1,436	24,927
Well Child	4,163	23,443	3,058	15,208	653	4,311	156	1,125	296	2,799
Adult Health	674	9,889	468	6,378	107	2,134	38	326	61	1,051
Cardiac a/	74	380	...	...	26	201	16	89	32	90
Child Development - LD	5	13	3	3	...	...	...	...	2	10
Neurology a/	60	248	2	20	40	193	...	...	9	35
Orthopedic b/	33	247	...	...	21	131	6	70	6	46
Otologic-Speech & Hearing	2	17	...	...	1	3	...	...	1	14
Other Crippled Children including Pediatric	57	199	2	4	35	118	11	19	9	58
Tuberculosis c/	2,923	91,970	1,117	53,418	538	8,232	297	10,326	971	19,994
Venereal Disease	...	...	...	...	...	...	...	...	...	...
Other Communicable Disease	2	11	...	...	2	11	...	...	...	...
Immunization	3	61	1	1	...	...	2	60	...	...
Leprosy	16	293	...	...	6	104	3	64	7	125
Others	404	2,446	237	1,535	111	75	14	131	42	705

a/ See Crippled Children Branch data.

b/ New Cases 0-14 years seen at Shriner's Hospital Screening Clinic.

c/ This does not include Honolulu Chest Clinic

... None

Table 3

PUBLIC HEALTH NURSING SERVICE TO SCHOOLS BY COUNTY a/
STATE OF HAWAII 1978

Type of School Health Program	State	Honolulu	Hawaii	Kauai	Maui
Schools Visited b/	...	...	...	...	...
Visits to Schools c/	1,153	1,064	30	14	45
Home Visits Made to Schoolage Children	17,451	9,811	2,228	1,354	4,058

a/ Excludes School Health Services Program

b/ Unduplicated Count

c/ All diagnostic categories

Table 4

PUBLIC HEALTH NURSING SERVICE TO SCHOOLS BY TYPE OF CLINIC BY COUNTY
STATE OF HAWAII 1978

Type of Clinic	State		Honolulu		Hawaii		Kauai		Maui	
	Session	Attendance	Session	Attendance	Session	Attendance	Session	Attendance	Session	Attendance
Vision Rescreening	44	1,904	28	1,410	6	331	2	23	8	140
TB Testing	16	476	4	30	12	446	...	...	...	...
Pediculosis	223	10,187	220	10,029	3	158	...	...	...	...
Others	13	158	13	158	...	...	...	...	...	...

SUMMARY

The promotion of "wellness" through good nutrition is the aim of the Nutrition Branch. Efforts are directed to the promotion of health, the prevention of disease and recovery from illness or injury through good nutrition.

This program provides nutritional consultations and direct services to other programs within the department, to other governmental agencies, community groups, to professionals and the general public and administers the Special Supplemental Food Program for Women, Infants and Children.

Preventive aspects of nutrition are emphasized in the promotion of health of the people of Hawaii by providing sound, up-to-date nutrition information through pamphlets, newsletters, news articles which incorporates information on island and ethnic foods. Nutrition information is provided to the public through talks to community and student groups, workshops, exhibits at health fairs, T.V. and radio programs, and incoming telephone calls.

Diet counseling is provided to children referred for anemia, obesity, underweight, cardiac or other nutritional problems through the Department of Health Clinics.

The Public Health Nutritionists provide consultation and licensure services to hospitals, skilled nursing facilities, care homes and day care centers to assist them in meeting dietary standards according to State and Federal regulations.

The Federally funded Special Supplemental Food Program for Women, Infants and Children (WIC Program) has been extended for four years. This program provides nutritious food to 3000 pregnant women, infants and children to age 5, who are at nutritional risk through a system of food vouchers.

TABLE 1
NUTRITION BRANCH SERVICES
STATE OF HAWAII: 1978

Type of Nutrition Service	Number of Sessions Consultations, Home Visits, Inspections, or Instructions	Number Reached or Participants
Nutrition Education Sessions		
Total	146	
Talks to community groups, students	101	4,311
Senior Citizens Group	---	636
Workshops	33	722
Radio and TV	4	---
Health Fairs	8	---
Newsletters		13,948
Nutrition Branch leaflets and booklets		119,791
Consultations and Inspections		
Day Care Centers		
Consultations	69	---
Inspections	66	---
Care Homes		
Consultations	187	---
Home Visits	112	---
Inspections	343	---
Hospital and Intermediate Care Facilities		
Consultations	34	---
Other Agencies and Individuals		
Consultations	1,454	---
Diet Instructions		
Total	722	
Diabetes	46	---
Cardiac Clinic	485	---
Weight Reduction	110	---
Others	81	---
Special Supplemental Food Program for Women, Infants and Children	---	3,750

MENTAL HEALTH DIVISION

The Mental Health Division provides both inpatient and outpatient services for a series of wide ranging problems affecting disparate populations. In order to better understand the nature, quality, and determinants of mental illness, the utilization patterns of services provide significant leads to understanding the nature and extent of these problems. Figure 1 displays the trends in various categories of patients: actives, admissions, terminations and duplicated counts.

The format of the tables in the following summary for calendar year 1978 is identical with the format for calendar years 1974, 1975, 1976 and 1977. The purpose of this annual replication of format is to allow the reader to examine comparatively, if desired, the trends in activities of the Division on a year-to-year basis. Therefore, the reader may refer to previous reports for further examination of categories of illness and statistical information.

Tables 1, 1A and 1B represent the total active patients by age and diagnostic categories in treatment as of the end of the year, 1978. The trend toward more younger people being served continues. The number of active patients is approximately the same as last year.

Table 2 represents a breakdown of the division of services by inpatient versus outpatient by location. These figures represent a population based utilization by catchment area of mental health services both at the community level, represented by outpatient care, and centrally at the Hawaii State Hospital and County/State Hospitals by inpatient care.

Table 3A and 3B are both further explications of this inpatient/outpatient breakdown by diagnosis and age. The usual relatively large proportion of severely ill patients, such as schizophrenics, are being treated in an inpatient setting.

Tables 4, 5, and 6 represent admissions to the total State and to the various area services provided by the Mental Health Division for the entire calendar year. This represents an incidence figure of cases over a period of time. The breakdown is by diagnosis, ethnicity, source of referral and age. Combined with past report tables these tables allow one to the trends in the types of problems that are occurring, those people who have these problems, and their frequency of occurrence.

Tables 7, 7A, and 7B represent unduplicated total admissions for the year broken down by ethnicity, age on admission, mean age, diagnosis and sex. Mean age here represents an average age for each category which allows one to look at an aggregate figure rather than a simple frequency distribution.

Tables 8 and 9 represent terminations during the year by geographic and services units as well as by age and diagnosis. Certain categories of diagnoses representing a preponderance of cases, both for admission and termination, are of use in planning.

Table 10 represents an unduplicated count of patients served in all facilities by their most recent diagnosis and age as of the period January through December, 1978. A total of 11,642 people were seen during the year, representing a slight increase of cases over the previous year.

Figure I

MENTAL HEALTH DIVISION MOVEMENT SUMMARY
1973 - 1978

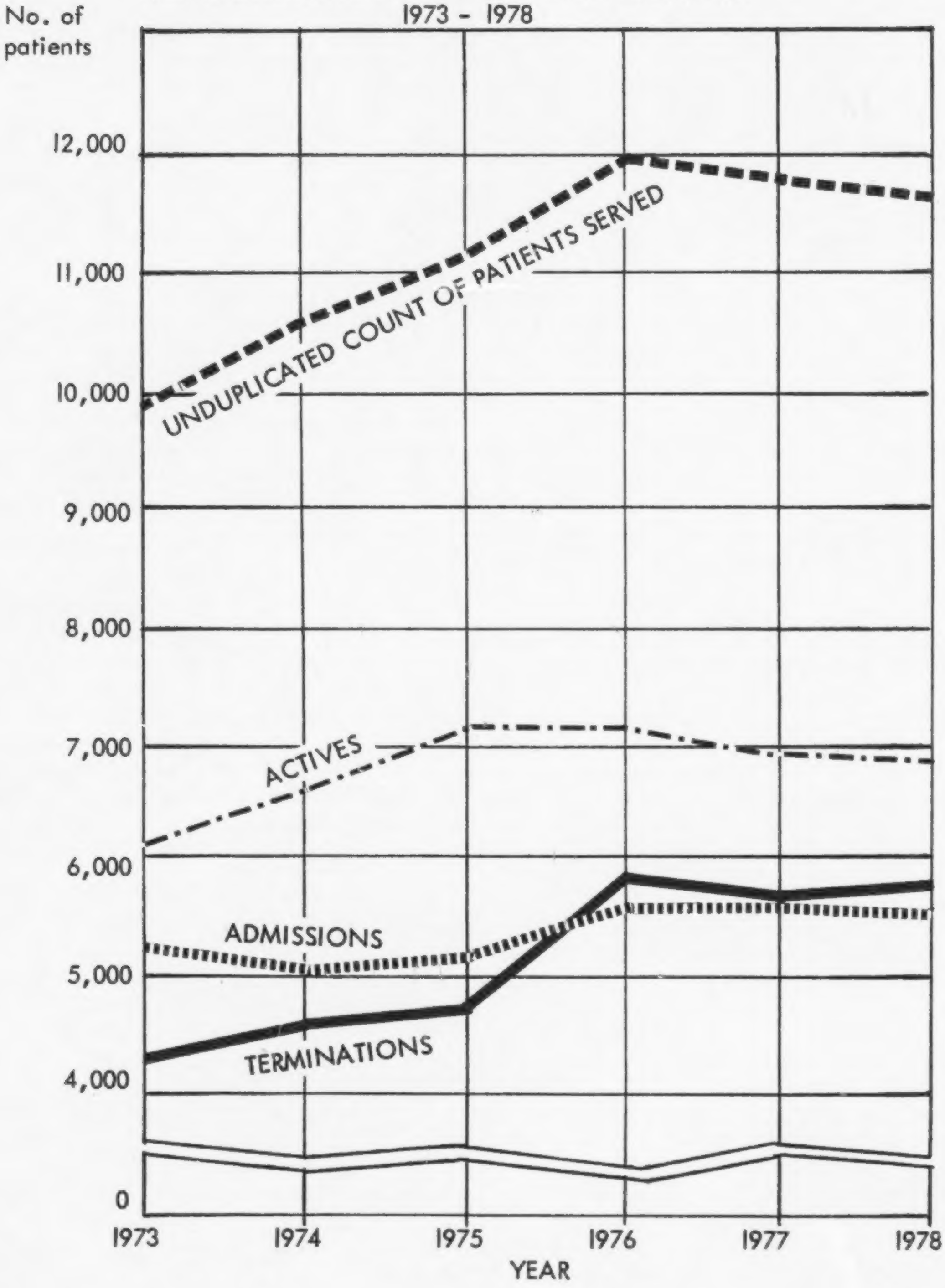

TABLE 1
PATIENTS ACTIVE DEC. 31, 1978, IN STATE MENTAL HEALTH FACILITIES BY MOST RECENT DIAGNOSIS AND AGE AS OF DEC. 31, 1978

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	6886	35	286	564	414	198	695	1742	1050	844	588	470
OBS* ASSOC. ALCOH.	35						1	1	3	8	10	12
OBS* ASSOC. DRUG	27				1	3	10	7	2	1	3	
OTHER OBS*	247	1	2	4	2	4	15	36	13	25	32	113
SCHIZO-PHRENIA	1884		2	10	8	18	152	433	368	419	320	154
OTHER PSYCHO-SES	262				1	6	9	41	50	64	46	45
PSYCHO-PHYSIO. DISORD.	14			1				4	5	2	1	1
NEURO-SES	743		1	11	9	9	86	271	142	111	69	34
ALCOH.	175				2		16	46	40	37	28	6
DRUG DEPEND.	95				3	5	36	36	10	3	1	1
OTHER PERSON. DISORD.	462		1	3	18	23	98	187	77	35	12	8
TRANS. SITUAT. DISORD.	1274	6	148	245	179	65	122	253	130	43	27	56
BEHAV. DISORD.	655	6	58	104	69	22	52	198	98	35	5	8
MENTAL RETARD.	146	2	2	3	6	8	25	33	23	21	19	4
NO MENTAL DISORD.	156	15	19	17	11	2	18	27	20	13	4	10
DIAG-NOSIS DEFER.	711	5	53	166	105	33	55	169	69	27	11	18
MISSING												

*ORGANIC BRAIN SYNDROME

TABLE 1A
MALE PATIENTS ACTIVE DEC. 31, 1978, IN STATE MENTAL HEALTH FACILITIES BY MOST RECENT DIAGNOSIS AND AGE AS OF DEC. 31, 1978

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	3540	17	210	389	222	99	394	936	467	338	243	225
OBS* ASSOC. ALCOH.	28						1	1	2	5	9	10
OBS* ASSOC. DRUG	13						4	7	1		1	
OTHER OBS*	143	1	1	2	2	4	13	26	7	13	17	57
SCHIZO-PHRENIA	997		2	8	1	13	110	291	182	181	140	69
OTHER PSYCHOSES	92				1	5	4	22	23	11	5	21
PSYCHO-PHYSIO. DISORD.	7			1				2	4			
NEUROSES	257		1	6	4	2	34	103	42	28	26	11
ALCOH.	147				1		11	41	33	32	23	6
DRUG DEPEND.	70				2	1	27	27	9	2	1	1
OTHER PERSON. DISORD.	299			1	12	16	73	126	46	15	6	4
TRANS. SITUAT. DISORD.	592	3	105	179	95	27	38	76	29	9	4	27
BEHAV. DISORD.	353	5	43	75	44	14	31	82	41	14	1	3
MENTAL RETARD.	86		2	2	5	6	13	27	13	10	7	1
NO MENTAL DISORD.	86	4	13	10	5		14	18	8	7	1	6
DIAGNOSIS DEFER.	370	4	43	105	50	11	21	87	27	11	2	9
MISSING												

*ORGANIC BRAIN SYNDROME

TABLE 1B
FEMALE PATIENTS ACTIVE DEC. 31, 1978, IN STATE MENTAL HEALTH FACILITIES BY MOST RECENT DIAGNOSIS AND AGE AS OF DEC. 31, 1978

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	3346	18	76	175	192	99	301	806	583	506	345	245
OBS* ASSOC. ALCOH.	7								1	3	1	2
OBS* ASSOC. DRUG	14				1	3	6		1	1	2	
OTHER OBS*	104		1	2			2	10	6	12	15	56
SCHIZO-PHRENIA	887			2	7	5	42	142	186	238	180	85
OTHER PSYCHO-SES	170					1	5	19	27	53	41	24
PSYCHO-PHYSIC. DISORD.	7							2	1	2	1	1
NEURO-SES	486			5	5	7	52	168	100	83	43	23
ALCOH.	28				1		5	5	7	5	5	
DRUG DEPEND.	25				1	4	9	9	1	1		
OTHER PERSCN. DISORD.	163		1	2	6	7	25	61	31	20	6	4
TRANS. SITUAT. DISORD.	682	3	43	66	84	38	84	177	101	34	23	29
BEHAV. DISORD.	302	1	15	29	25	8	21	116	57	21	4	5
MENTAL RETARD.	60	2		1	1	2	12	6	10	11	12	3
NO MENTAL DISORD.	70	11	6	7	6	2	4	9	12	6	3	4
DIAG-NOSIS DEFER.	341	1	10	61	55	22	34	82	42	16	9	9
MISSING												

*ORGANIC BRAIN SYNCROME

TABLE 2
PATIENTS ACTIVE DEC. 31, 1978, IN STATE MENTAL HEALTH FACILITIES BY COMPREHENSIVE CENTERS OR SPECIAL SERVICES AND TYPE OF SERVICE

	TOTAL	CENTRAL OAHU	WIND-WARD	LEEWARD	DIAMOND HEAD	KALIHI-PALAMA	MAUI	EAST HAWAII	WEST HAWAII	KAUAI	HSH & CENTRAL SRVS	OTHER SRVS
TOTAL	6886	604	884	841	832	1363	548	636	487	255	377	59
IN-PATIENT CARE	263	26	21	11	31	29	10	6	4	1	65	59
OUT-PATIENT CARE	6623	578	863	830	801	1334	538	630	483	254	312	

TABLE 3
IN -PATIENTS ACTIVE DEC. 31, 1978, IN STATE MENTAL HEALTH FACILITIES BY MOST RECENT DIAGNOSIS AND AGE AS OF DEC. 31, 1978

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	263		9	13	18	7	31	81	41	27	14	22
OBS* ASSOC. ALCOH.	2								1	1		
OBS* ASSOC. DRUG	4				1	1	1		1			
OTHER OBS*	30				1		1	2	2	5	4	15
SCHIZO-PHRENIA	137			1	2	2	19	59	27	15	8	4
OTHER PSYCHO-SES	19					1	1	4	4	6	1	2
PSYCHO-PHYSIO. DISORD.												
NEURO-SES	6				2		1	1	2			
ALCOH.	2							1			1	
DRUG DEPEND.	2				1		1					
OTHER PERSCN. DISORD.	12			2	1	1	3	4	1			
TRANS. SITUAT. DISORD.	12		2	1	5		1	1	1			1
BEHAV. DISORD.	21		7	8	3	1		2				
MENTAL RETARD.	4				2			1	1			
NO MENTAL DISORD.												
DIAG-NOSIS DEFER.	12			1		1	3	6	1			
MISSING												

*ORGANIC BRAIN SYNDROME

TABLE 3A
OUT-PATIENTS ACTIVE DEC. 31, 1978, IN STATE MENTAL HEALTH FACILITIES
BY MOST RECENT DIAGNOSIS AND AGE AS OF DEC. 31, 1978

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	6623	35	277	551	396	191	664	1661	1009	817	574	448
OBS* ASSOC. ALCOH.	33						1	1	2	7	10	12
OBS* ASSOC. DRUG	23					2	9	7	1	1	3	
OTHER OBS*	217	1	2	4	1	4	14	34	11	20	28	98
SCHIZOPHRENIA	1747		2	9	6	16	133	374	341	404	312	150
OTHER PSYCHOSES	243				1	5	8	37	46	58	45	43
PSYCHOPHYSIO. DISORD.	14			1				4	5	2	1	1
NEUROSES	737		1	11	7	9	85	270	140	111	69	34
ALCOH.	173				2		16	45	40	37	27	6
DRUG DEPEND.	93				2	5	35	36	10	3	1	1
OTHER PERSON. DISORD.	450		1	1	17	22	95	183	76	35	12	8
TRANS. SITUAT. DISORD.	1262	6	146	244	174	65	121	252	129	43	27	55
BEHAV. DISORD.	634	6	51	96	66	21	52	196	98	35	5	8
MENTAL RETARD.	142	2	2	3	4	8	25	32	22	21	19	4
NO MENTAL DISORD.	156	15	19	17	11	2	18	27	20	13	4	10
DIAGNOSIS DEFER.	699	5	53	165	105	32	52	163	68	27	11	18
MISSING												

*ORGANIC BRAIN SYNDROME

TABLE 4
ADMISSIONS TO STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78
BY AGE AND DIAGNOSIS ON ADMISSION

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	5441	79	348	665	489	251	794	1507	615	374	185	134
OBS* ASSOC. ALCOH.	31						3	10	4	7	5	2
OBS* ASSOC. DRUG	28				2	5	10	10		1		
OTHER OBS*	240	3	10	26	23	11	17	37	24	23	18	48
SCHIZO-PHRENIA	691		1	4	20	50	126	286	107	57	34	6
OTHER PSYCHO-SES	172	1			2	4	13	54	36	37	16	9
PSYCHO-PHYSIC. DISORD.	13							4	3	2	4	
NEURO-SES	567		2	10	10	23	104	210	96	67	33	12
ALCOH.	190			1	2	1	23	60	33	42	24	4
DRUG DEPEND.	92				3	8	35	41	4	1		
OTHER PERSON. DISORD.	399		2	2	19	36	105	161	48	22	3	1
TRANS. SITUAT. DISORD.	1346	28	193	260	228	48	154	253	98	32	23	29
BEHAV. DISORD.	631	11	66	107	69	17	56	167	93	37	5	3
MENTAL RETARD.	70	2	3	1	4	9	21	15	7	6	2	
NO MENTAL DISORD.	258	24	34	39	22	10	42	39	21	13	8	6
DIAG-NOSIS DEFER.	713	10	37	215	85	29	85	160	41	27	10	14
MISSING												

*ORGANIC BRAIN SYNDROME

TABLE 5
ADMISSIONS TO STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78 BY ETHNIC GROUP AND CATCHMENT AREA ON ADMISSION

	TOTAL	DIAMOND HEAD	KALIHI-PALAMA	CENTRAL OAHU	WIND-WARD	LEEWARD	EAST HAWAII	WEST HAWAII	MAUI	KAUAI	OTHER/ UNKNOWN
TOTAL	5441	991	1099	743	547	463	361	341	486	201	209
CAUCA.	1907	447	174	203	208	123	136	176	243	85	112
HAWN	47	7	8	1	5	4	5	7	8		2
CHINESE	108	38	27	17	10	3	8	1		1	3
FILIP.	444	15	172	75	14	43	31	33	25	25	11
JAPAN.	503	118	79	92	49	31	45	22	39	21	7
P.RICAN	127	16	38	24	8	19	11	5	3	3	
PT.HAWN	999	127	271	161	137	79	66	54	74	10	20
PORTUG.	182	11	24	22	26	13	30	23	19	9	5
OTHER	851	129	284	116	61	110	23	14	59	21	34
UNKNOWN	270	81	22	32	29	38	5	6	16	26	15
MISSING	3	2					1				

TABLE 6
ADMISSIONS TO STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78 BY REFERRAL SOURCE AND COMMUNITY MENTAL HEALTH CENTER OR SERVICE

	TOTAL	CENTRAL OAHU	WIND-WARD	LEEWARD	DIAMOND HEAD	KALIHI-PALAMA	MAUI	EAST HAWAII	WEST HAWAII	KAUAI	HSH & CENTRAL SRVS	OTHER SRVS
SELF FAMILY FRIEND	1974	251	167	230	323	293	210	198	185	104	11	2
CLERGY	15	4	2	1	3	1			4			
NON-PSYCH. PHYSICN	234	31	19	19	9	7	51	27	46	14	11	
PRIVATE PRACTIC PROFESS	117	12	9	2	16	9	15	9	13	4	20	8
PUBLIC PSYCH. HOSP.	24	2	5	2	7	3	2				2	1
OTHER PSYCH. HOSP.	156	24	14	15	43	35	2	3	2	2	15	1
COMUNTY M.H. CENTER	121	10	10	7	23	40	7	7	3	4	10	
OTHER NONPSYC HOSP	344	44	39	23	135	58	3	6	5	13	18	
OUTPAT M.H. CLINIC	31	3	1		16	3	3				2	3
SCHOOL SYSTEM	658	88	25	65	57	313	43	21	11	14	21	
SOCIAL OR COM. AGENCY	433	45	35	33	48	107	68	14	38	15	28	2
COURT ENFORCE CORRECT	1081	49	20	25	48	61	43	24	18	28	763	2
OTHER	242	17	25	36	36	37	17	30	16	11	14	3
UNKNOWN	11		1	3					3	2	2	

TABLE 7
UNDUPLICATED TOTAL ADMISSIONS TO STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78, ETHNIC GROUP BY DIAGNOSIS ON ADMISSION INCLUDING MEAN AGE ON ADMISSION

	TOTAL	CAUCA.	HAWN	CHINESE	FILIP.	JAPAN.	P.RICAN	PT.HAWN	PORTUG.	OTHER	UNKNOWN	MISSING
TOTAL	5068 27.077	1800 29.357	44 32.750	100 31.560	415 26.940	472 31.432	117 25.786	916 22.209	171 31.550	774 23.061	257 27.743	2 18.000
OBS* ASSOC. ALCOH.	29 43.207	16 40.188	1 51.000		2 54.000	2 52.000		1 40.000	2 55.000	4 41.250	1 32.000	
OBS* ASSOC. DRUG	20 24.500	8 27.625			1 19.000	1 18.000	1 21.000	2 28.500		5 23.000	1 23.000	1 16.000
OTHER OBS	81 57.901	18 49.389	3 43.000	3 74.000	7 72.143	13 75.769	1 19.000	16 45.438	6 63.833	3 35.333	11 65.909	
SCHIZO- PHRENIA	588 31.665	199 30.648	2 26.500	16 31.438	49 32.265	87 34.230	11 34.455	81 31.123	21 32.190	81 30.210	41 33.707	
OTHER PSYCHOS	143 41.014	75 39.213	1 62.000	1 59.000	12 47.583	12 43.167	6 43.167	10 39.700	9 42.556	13 37.462	4 47.000	
PSYCHO- PHYSIO. DISORD.	11 41.091	1 27.000		1 55.000	2 30.500	2 38.000		2 52.000		3 43.000		
NEURO- SES	534 33.537	247 34.721	5 37.400	16 35.563	25 34.720	52 36.096	14 32.786	70 28.314	22 36.818	46 29.565	37 33.000	
ALCOH.	178 38.708	120 38.958	4 32.500		6 37.333	9 49.333	4 39.000	13 28.615	3 29.333	14 40.071	5 48.000	
DRUG DEPEND.	84 25.536	34 27.235		2 22.500	2 19.500	7 25.429	3 24.000	23 25.304	2 22.000	10 22.900	1 30.000	
OTHER PER.DIS	365 27.767	135 29.074	5 24.200	8 34.500	22 26.409	42 30.524	9 24.111	83 23.627	13 31.231	39 28.615	9 27.778	
TRANS. SITUAT. DISORD.	1305 21.546	444 24.074	7 26.571	26 25.462	101 20.624	105 24.305	29 19.034	260 17.919	38 26.421	226 19.106	69 20.478	
BEHAVIO DISORDS	611 24.380	195 25.677	5 27.400	3 31.667	64 24.734	52 27.135	10 24.600	116 20.802	22 27.545	110 23.682	34 23.324	
MENTAL RETARDA	59 26.644	1 17.000	1 58.000	1 31.000	7 29.286	6 28.667	3 29.000	24 22.458	6 34.333	7 30.571	3 14.333	
NO MENTAL DISORD.	248 22.153	56 25.571	3 36.667	7 27.571	29 26.828	21 22.048	4 23.250	37 19.216	7 17.286	80 19.175	4 14.750	
DIAG- NOSIS DEFER.	679 22.383	208 26.990	5 27.200	11 21.909	78 22.859	44 27.591	19 19.842	143 17.699	15 28.800	121 18.066	34 19.529	1 20.000
MISSING	133 26.316	43 27.023	2 40.500	5 41.000	8 23.875	17 33.176	3 26.667	35 21.343	5 25.200	12 23.083	3 22.333	

*ORGANIC BRAIN SYNDROME

**UPPER FIGURE REPRESENTS NUMBER OF ADMISSIONS.
LOWER FIGURE REPRESENTS MEAN AGE OF ADMISSION.

TABLE 7A
UNDUPLICATED MALE ADMISSIONS TO STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78, ETHNIC GROUP BY DIAGNOSIS ON ADMISSION INCLUDING MEAN AGE ON ADMISSION

	TOTAL	CAUCA.	HAWN	CHINESE	FILIP.	JAPAN.	P.RICAN	PT.HAWN	PORTUG.	OTHER	UNKNOWN
TOTAL	2696 25.420	931 27.915	27 32.444	50 26.800	205 26.098	239 28.653	65 25.400	538 21.087	95 29.716	430 22.258	116 23.603
OBS* ASSOC. ALCOH.	22 40.591	11 35.818	1 51.000		1 48.000	2 52.000		1 40.000	2 55.000	3 38.000	1 32.000
OBS* ASSOC. DRUG	14 25.143	5 27.400				1 18.000	1 21.000	2 28.500		4 24.000	1 23.000
OTHER OBS	50 50.560	11 39.636	2 39.500	1 62.000	6 69.667	6 72.833	1 19.000	13 39.231	4 65.500	3 35.333	3 66.333
SCHIZO-PHRENIA	367 29.455	130 28.938	1 30.000	12 27.083	26 32.462	49 31.429	7 33.429	50 28.140	13 30.231	53 28.736	26 28.923
OTHER PSYCHOS	65 39.708	38 37.500			2 74.500	3 50.333	3 46.667	7 38.429	5 41.000	6 33.333	1 42.000
PSYCHO-PHYSIO. DISORD.	5 40.200				1 36.000	1 32.000		2 52.000		1 29.000	
NEURO-SES	206 31.942	110 33.373	2 25.000	2 26.000	12 31.667	14 32.429	2 34.000	24 24.250	7 37.286	19 31.579	14 33.000
ALCOH.	143 38.580	94 38.128	3 32.000		5 42.000	8 48.625	3 43.333	12 29.333	2 32.500	12 39.250	4 55.000
DRUG DEPEND.	61 25.967	24 27.458		1 21.000	2 19.500	6 26.167	3 24.000	15 26.467	2 22.000	8 24.375	
OTHER PER.DIS	244 27.086	83 28.590	4 24.500	4 29.750	15 26.067	28 30.679	9 24.111	63 23.016	10 30.200	26 28.500	2 29.500
TRANS. SITUAT. DISORD.	573 17.510	162 19.049	4 33.000	11 17.636	47 18.000	47 19.426	14 14.429	135 15.207	18 24.333	108 16.537	27 14.185
BEHAVIO DISORDS	307 20.573	83 21.349	2 20.000		28 21.643	26 19.385	8 26.500	73 18.932	14 23.214	59 21.542	14 14.571
MENTAL RETARDA	38 26.632		1 58.000	1 31.000	2 24.000	2 33.500	3 29.000	19 23.579	3 29.333	6 26.167	1 28.000
NO MENTAL DISORD.	150 24.513	36 25.000	3 36.667	5 31.600	17 28.941	19 23.421	2 23.500	25 22.040	4 19.000	38 23.421	1 8.000
DIAG-NOSIS DEFER.	361 20.684	116 26.103	2 25.500	8 21.625	34 20.000	15 26.533	8 19.000	74 17.135	8 22.500	77 16.286	19 14.895
MISSING	90 26.344	28 27.214	2 40.500	5 41.000	7 23.286	12 31.667	1 50.000	23 20.652	3 24.667	7 19.714	2 21.500

*ORGANIC BRAIN SYNDROME
**UPPER FIGURE REPRESENTS NUMBER OF ADMISSIONS.
LOWER FIGURE REPRESENTS MEAN AGE OF ADMISSION.

TABLE 7B
UNDUPLICATED FEMALE ADMISSIONS TO STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78, ETHNIC GROUP BY DIAGNOSIS ON ADMISSION INCLUDING MEAN AGE ON ADMISSION

	TOTAL	CAUCA.	HAWN	CHINESE	FILIP.	JAPAN.	P.RICAN	PT.HAWN	PORTUG.	OTHER	UNKNOWN	MISSING
TOTAL	2372 28.961	869 30.902	17 33.235	50 36.320	210 27.762	233 34.283	52 26.269	378 23.804	76 33.842	344 24.064	141 31.149	2 18.000
OBS* ASSOC. ALCOH.	7 51.429	5 49.800			1 60.000					1 51.000		
OBS* ASSOC. DRUG	6 23.000	3 28.000			1 19.000					1 19.000		1 16.000
OTHER OBS	31 69.742	7 64.714	1 50.000	2 80.000	1 87.000	7 78.286		3 72.333	2 60.500		8 65.750	
SCHIZO-PHRENIA	221 35.335	69 33.870	1 23.000	4 44.500	23 32.043	38 37.842	4 36.250	31 35.935	8 35.375	28 33.000	15 42.000	
OTHER PSYCHOS	78 42.103	37 40.973	1 62.000	1 59.000	10 42.200	9 40.778	3 39.667	3 42.667	4 44.500	7 41.000	3 48.667	
PSYCHO-PHYSIO. DISORD.	6 41.833	1 27.000		1 55.000	1 25.000	1 44.000				2 50.000		
NEURO-SES	328 34.540	137 35.803	3 45.667	14 36.929	13 37.538	38 37.447	12 32.583	46 30.435	15 36.600	27 28.148	23 33.000	
ALCOH.	35 39.229	26 41.962	1 34.000		1 14.000	1 55.000	1 26.000	1 20.000	1 23.000	2 45.000	1 20.000	
DRUG DEPEND.	23 24.391	10 26.700		1 24.000		1 21.000		8 23.125		2 17.000	1 30.000	
OTHER PER.DIS	121 29.140	52 29.846	1 23.000	4 39.250	7 27.143	14 30.214		20 25.550	3 34.667	13 28.846	7 27.286	
TRANS. SITUAT. DISORD.	732 24.706	282 26.961	3 18.000	15 31.200	54 22.907	58 28.259	15 23.333	125 20.848	20 28.300	118 21.458	42 24.524	
BEHAVIO DISORDS	304 28.224	112 28.884	3 32.333	3 31.667	36 27.139	26 34.885	2 17.000	43 23.977	8 35.125	51 26.157	20 29.450	
MENTAL RETARDA	21 26.667	1 17.000			5 31.400	4 26.250		5 18.200	3 39.333	1 57.000	2 7.500	
NO MENTAL DISORD.	98 18.541	20 26.600		2 17.500	12 23.833	2 9.000	2 23.000	12 13.333	3 15.000	42 15.333	3 17.000	
DIAG-NOSIS DEFER.	318 24.311	92 28.109	3 28.333	3 22.667	44 25.068	29 28.138	11 20.455	69 18.304	7 36.000	44 21.182	15 25.400	1 20.000
MISSING	43 26.256	15 26.667			1 28.000	5 36.800	2 15.000	12 22.667	2 26.000	5 27.800	1 24.000	

*ORGANIC BRAIN SYNDROME
**UPPER FIGURE REPRESENTS NUMBER OF ADMISSIONS.
LOWER FIGURE REPRESENTS MEAN AGE OF ADMISSION.

TABLE 8
TERMINATIONS FROM STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78
BY AGE AND DIAGNOSIS ON TERMINATION

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	5522	51	267	560	502	246	807	1595	690	409	239	156
OBS* ASSOC. ALCOH.	42				1		5	9	11	7	5	4
OBS* ASSOC. DRUG	35				1	6	10	10	3	3	1	1
OTHER OBS*	253	2	11	26	23	6	25	39	30	19	20	52
SCHIZO-PHRENIA	748		2	1	16	30	123	301	113	82	53	27
OTHER PSYCHO-SES	160	1			1	1	15	52	28	31	20	11
PSYCHO-PHYSIO. DISORD.	19			1	1		1	6	4	3	3	
NEURO-SES	647	1	1	5	7	23	100	256	114	78	48	14
ALCOH.	218				1	3	14	75	38	56	24	7
DRUG DEPEND.	95				5	6	36	39	7	2		
OTHER PERSON. DISORD.	485		2	6	12	27	114	213	75	21	12	3
TRANS. SITUAT. DISORD.	1303	20	139	260	225	67	173	253	92	33	25	16
BEHAV. DISORD.	660	2	60	113	92	31	75	151	93	32	6	5
MENTAL RETARD.	76		3	2	7	6	21	15	7	9	4	2
NO MENTAL DISORD.	398	23	41	50	24	14	54	98	52	23	13	6
DIAG-NOSIS DEFER.	383	2	8	96	86	26	41	78	23	10	5	8
MISSING												

*ORGANIC BRAIN SYNDROME

TABLE 9
TERMINATIONS FROM STATE MENTAL HEALTH FACILITIES, 1/1/78 TO 12/31/78 BY COMMUNITY MENTAL HEALTH CENTER OR SERVICE AND DISPOSITION

	TOTAL	CENTRAL OAHU	WIND-WARD	LEEWARD	DIAMOND HEAD	KALIHI-PALAMA	MAUI	EAST HAWAII	WEST HAWAII	KAUAI	HSH & CENTRAL SRVS	OTHER SRVS
TOTAL	5522	682	305	457	804	846	523	385	229	196	1035	60
PUBLIC PSYCH HOSP	33	2	1	1	1	1	2	2		3	20	
OTHER PSYCH HOSP	45	7	2	2	11	6	2		2		1	12
COMM M.H. CENTER	120	3	2	5	12	9	5	4	1	16	58	5
NURSING HOME	9			1		2	1	1			4	
OTHER NON-PSY INPATNT	47	12	3		8	5	1			1	17	
OUTPTNT M.H. CLINICS	46	5	3	2	16	6		2		2	6	4
PRIVATE PRACTCE MH PROF	296	24	16	7	77	38	29	14	24	32	26	9
SOCIAL COMMNTY AGENCES	679	15	7	2	25	73	10	7	3	7	524	6
NON-PSY PHYSICN	56	3	4	4	6	11	5	3	4	9	7	
NOT REFER IN NEED	723	185	43	120	86	107	78	43	23	31	5	2
NOT REFER NOT NED	1581	150	100	104	172	343	148	113	80	38	331	2
UNKNOWN	1641	250	113	197	335	153	232	190	90	56	22	3
OTHER	245	28	11	13	59	57	16	6	4	10	32	9

NOTE: THE SUMS OF COLUMNS WILL NOT NECESSARILY BE EQUAL TO THE TOTAL SINCE A PATIENT MAY HAVE MORE THAN ONE REFERRAL ON TERMINATION.

TABLE 10
UNDUPLICATED COUNT OF PATIENTS SERVED, STATE MENTAL HEALTH FACILITIES BY MOST RECENT DIAGNOSIS AND AGE, 1/1/78 TO 12/31/78

	TOTAL	0 - 4	5 - 9	10 - 14	15 - 17	18 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & OVER
TOTAL	11642	82	542	1036	840	406	1396	3099	1643	1200	792	606
OBS* ASSOC. ALCOH.	70				1		5	8	12	15	14	15
OBS* ASSOC. DRUG	54				1	8	16	16	5	3	4	1
OTHER OBS*	469	3	13	24	22	9	39	73	40	42	48	156
SCHIZOPHRENIA	2421		4	11	17	38	238	641	448	483	363	178
OTHER PSYCHOSES	377				1	6	19	78	71	86	62	54
PSYCHOPHYSIC. DISORD.	30			2	1		1	9	8	5	3	1
NEUROSES	1314		2	15	14	29	174	500	237	183	113	47
ALCOH.	367				2	3	29	112	73	88	49	11
DRUG DEPEND.	170				6	9	66	66	16	5	1	1
OTHER PERSON. DISORD.	871		3	7	29	44	198	363	141	53	22	11
TRANS. SITUAT. DISORD.	2460	25	284	482	374	124	282	481	214	74	49	71
BEHAV. DISORD.	1270	8	113	201	150	52	124	344	189	65	11	13
MENTAL RETARD.	207	2	5	3	11	12	43	46	29	28	22	6
NO MENTAL DISORD.	532	37	58	62	34	15	68	121	70	35	16	16
DIAGNOSIS DEFER.	1030	7	60	229	177	57	94	241	90	35	15	25
MISSING												

*ORGANIC BRAIN SYNDROME

WAIMANO
TRAINING SCHOOL
AND
HOSPITAL DIVISION

DEPARTMENT OF HEALTH ANNUAL REPORT

WAIMANO TRAINING SCHOOL AND HOSPITAL

Summary

The population of Waimano continues to decline over the years, reflecting the emphasis on deinstitutionalization. Table 1 shows that in the past year of operation, the population decreased by 53 patients, from 535 at the start to 482 at the end. By the same token, the number living in the community increased from 572 to 599. Beginning next year's report, all of the community figures will be included in the Family Health Services Division report due to the recent reorganization.

Other data show that the number of patients added and removed from the institution during the year increased because of a change in method of data collection: Waimano now counts each entry and each exit rather than the number of patients who return. Returns from Community Placement is a duplicated count and does not reflect the number whose conditional release is terminated.

The new admission figure continues at a low level of 13 per year. Direct discharges and deaths continue at about the same rate.

In the community, there was an increase of 28 residents in the total population. Direct discharges and deaths while on leave continued at about the same rate.

Table 2 shows a continued downward trend of the various intellectual levels. The severely and profoundly retarded categories constitute the largest group in the institution.

In the community, as opposed to the institution, the majority of the retarded are in the mildly and moderately retarded categories. The number in the severely retarded category continues to increase due to the available resources at care home level.

TABLE 1
WAIMANO TRAINING SCHOOL & HOSPITAL
STATISTICAL MOVEMENT OF PATIENTS BY FISCAL YEAR
STATE OF HAWAII: FISCAL YEAR 1977-1978

Waimano Population	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78
Institution								
Patients in residence at start	753	761	723	705	702	638	587	535
Patients added during the year	88	62	72	63	34	31	44	66
Admissions during the year	49	36	38	37	17	10	12	13
Returns from community placement	39	26	33	26	17	21	32	53
Patients removed from Hospital during the year	80	100	90	66	98	82	96	119
Direct discharge	7	14	14	4	5	10	7	4
Deaths in hospital	12	15	20	14	15	13	13	14
Community Placements	61	71	55	45	78	58	76	101
Patients in residence at end of year	761	723	705	702	638	587	535	482
Community								
Patience on leave at start of year	453	435	456	464	473	525	546	572
Community placements	61	71	55	45	78	58	76	101
Discharge while on leave	37	14	13	10	7	12	14	18
Deaths on leave	3	10	1	3	2	5	5	2
Returns from community placement	39	26	33	26	17	20	32	53
Patients on leave at end of year	435	456	464	473	525	546	572	600

TABLE 2
RESIDENT AND LEAVE POPULATION, WAIMANO, June 30
DISTRIBUTION BY YEAR AND MEASURED INTELLIGENCE
STATE OF HAWAII: FISCAL YEAR 1977-78

Measured Intelligence	Resident Population on June 30								Leave Population on June 30							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1972	1973	1974	1975	1976	1977	1978
Total	761	723	705	702	638	587	535	482	435	456	464	473	525	546	572	599
I. Mild Educable	54	37	40	39	35	23	21	24	134	140	132	125	124	121	126	132
II. Moderate Trainable	169	151	141	135	107	94	85	72	186	197	202	210	234	240	257	269
III. Severe	248	252	246	244	226	209	193	174	74	76	84	89	106	121	126	130
IV. Profound	266	273	270	277	265	254	230	207	15	18	22	25	35	40	40	46
Borderline	11	9	6	6	3	5	5	4	16	18	17	17	19	18	17	17
No Retardation	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Undetermined Intelligence	13	1	1	1	2	2	1	1	10	7	7	7	7	6	6	5

1978 Statistical Report

Department of Health
ADMINISTRATIVE STAFF
December 31, 1978

Director of Health	GEORGE YUEN, B.S.C.E.
Deputy Director of Health	VERNE C. WAITE, M.D.
Deputy Director, Administration	TADAO BEPPU, B.A.
Deputy Director of County/State Hospitals	HENRY N. THOMPSON, M.A.
Deputy Director, Environmental Health	JAMES S. KUMAGAI, Ph.D., P.E.
Administrative Assistant	LESLIE E. TAKENAKA, B.B.A.
Chief, Administrative Services Office	ROBERT I. UEOKA, B.B.A.
Personnel Officer	HENRY TAKESHITA, B.A.
Health Education Officer	CHRISTINE LING, ED.B., M.P.H.
Comprehensive Health Planning Officer	JAMES L. SWENSON, M.DIV.
Chief, Research and Statistics Office	THOMAS A. BURCH, M.D., M.P.H.
State Registrar of Vital Statistics and Assistant Chief	GEORGE H. TOKUYAMA, M.P.H., M.B.A.
Chief, Children's Health Services Division	ALLAN C. OGLESBY, M.D., M.P.H.
Chief, Crippled Children's Branch	PHYLLIS WRIGHT, M.D.
Chief, Maternal and Child Health Branch	JAMES E. DRORBAUGH, M.D., M.P.H.
Chief, School Health Branch	JEREMY M.S. LAM, M.D.
Chief, Communicable Disease Division (Administrative Officer)	VACANT
Public Health Veterinarian	VACANT
Chief, Epidemiology Branch	NED WIEBENGA, M.D., M.P.H.
Chief, Hale Mohalu Hospital Branch	ERIDA REICHERT, M.D.
Chief, Kalaupapa Settlement Branch	VACANT
Chief, Tuberculosis Branch	VACANT
Chief, Dental Health Division	MANUEL C.W. KAU, D.D.S., M.P.H.
Chief, Dental Hygiene Branch	JOYCE H. HARA, DENTAL HYGIENE CERTIFICATE
Chief, Hospital Dentistry & Community Services Br.	MANUEL C.W. KAU, D.D.S., M.P.H.
Chief, Environmental Protection and Health Services Division	SHINJI SONEDA, M.S.S.E.
Chief, Pollution Investigation and Enforcement Branch	PAUL F. AKI, B.A.
Chief, Food and Drug Branch	VACANT
Chief, Noise and Radiation Branch	THOMAS M. ANAMIZU
Chief, Pollution Technical Review Branch	RALPH K. YUKUMOTO, M.S.C.E.
Chief, Sanitation Branch	PETER GOO, B.S.
Chief, Vector Control Branch	PATRICK Y. NAKAGAWA, M.S.
Administrator, Litter Control Program	CLYDE B. MORITA, M.S., P.E.
Chief, Medical Health Services Division	VACANT
Chief, Chronic Disease Branch	KLEONA RIGNEY, M.D., M.P.H.
Chief, Emergency Health Mobilization Branch	VACANT
Chief, Hospital & Medical Facilities Branch	JOHN F. CHALMERS, M.D.
Chief, Laboratories Branch	ALBERT I. ODA, B.S.
Chief, Nutrition Branch	FLORA THONG, B.S., M.S.
Chief, Public Health Nursing Branch	ROSE K. MOOREFIELD, B.S., M.P.H.
Chief, Mental Health Division	DENIS MEE-LEE, M.D., B.S., M.Sc.
Chief, Central Administrative Services	GEORGE TERADA, B.A.
Chief, Children's Mental Health Services Branch	SAMUEL PALTIN, D.O., M.A., M.D.
Administrator, Hawaii State Hospital	FRANK KEIFER, B.B.A.
Chief, Courts and Corrections Branch	JOHN BLAYLOCK, B.A., M.A., Ph.D.
Acting Chief, Program Support Services	SHIRLEY HAYASHI, B.A., M.S.S.
Chief, Alcohol & Drug Abuse Branch	TIM WEE, B.A.
Chief, Leeward Oahu Community Mental Health Center	FRANK BORUCH, M.D.
Chief, Diamond Head Community Mental Health Center	ANTONIO DY, B.S., M.D.
Chief, Kalihi-Palama Community Mental Health Center	LEONARD JACOBS, B.A., M.D.
Acting Chief, Central Oahu Community Mental Health Ctr	SUNAO MURATA, B.A., M.S.W.
Chief, Windward Oahu Community Mental Health Center	CHESTER TAYLOR, B.S., M.D.
Chief, Hawaii Mental Health Center	JOHN MEBANE, M.D.
Acting Chief, Kauai Mental Health Center	ENSLEY UYENO, B.A., M.A., Ph.D.
Chief, Maui Mental Health Center	EDGAR AUERSWALD, B.S., M.D.
Hospital Executive Officer, County/State Hospital System	RIKIO TANJI, B.A.
Administrative Director, Hawaii County Hospital System	DONALD McGRATH, B.A.,C.H.A.
Administrative Director, Maui County Hospital System	WALLACE T. YANAGI, M.A.
Administrative Director, Kauai County Hospital System	RICHARD JOHNSTON, B.S.
Administrative Director, Honolulu County Hospital System	ABRAHAM CHOY, B.S.
Chief, Waimano Training School & Hospital	GARRET YANAGI, Ph.D.
District Health Officer, Hawaii	ANDREW P. SACKETT, M.D., D.P.H.
District Health Officer, Maui	SIDNEY B. CLARK, M.D., M.P.H.
District Health Officer, Kauai	ROBERT J. MELTON, M.D., M.P.H.